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AGRICULTURAL COLLEGE IN MARYLAND.

Letter from the Hon. Mr. Clemson, of Prince George's Co., Md., to Jas. T. Earle, Esq., President of the Maryland State Agricultural Society.

[Published by order of the Society.]

THE HOME, Oct. 4th, 1856.

SIR:—I have the honor to acknowledge the receipt of your favor, of the 27th ult., inviting me to deliver an address on the importance and advantage of a scientific institution for the advancement of Agriculture, at the annual festival of the Agricultural Society of Maryland, on the evening of the 22d inst. It will be impossible for me to comply with your request, as business peremptorily requires me to be in New York, at that time.

I have felt a deep interest in the subject since it was first agitated, and I feel concerned to learn, that the project drags, now that it is presented to the farmers of Maryland, who have always been among the foremost in the advancement of Agriculture. The necessity for general instruction in the sciences, upon which the arts, including Agriculture depend, has been largely discussed in different States of the Union, and in some even acted upon.

It has been likewise considered by the people of this State, and adopted by their Representatives at Annapolis, and by them is now returned to be practically put in action, and according to the amount of subscriptions it will be founded on a worthy basis, or let fall from apathy or indifference.

The subject is one of momentous interest, one of light or darkness, poverty or wealth, and comparative degradation or elevation. The only possible hope for the advancement of the arts is through science. The latter is the foundation upon which the former are built. Those who depend upon routine, must ever be behind, and advancement by that route is almost impossible. Science is correct practice, authentic, unerring history of all that has been discovered and invented since the creation of man. How absurd to compare the man of routine with the educated practitioner! The one is an electric telegraph, the other the ox-cart. He who looks with indifference upon science, must be ignorant, and has neglected to use his A, B, C, or the rudiments which he has acquired, and by which he was to educate himself.

Bounteous heaven has given man the raw materials of which this world is composed. It is science that teaches how they may be transformed and made subservient to our wants. Those who look upon this wonderful creation as a heterogeneous but harmless mixture of innumerable materials, are wrong. Vitality, power and matter were created once and forever—they may change, but are not destroyed—annihilation is impossible. The material world, of which we form part, is composed of a definite and limited number of simple substances, each distinct and having different

properties, and combining together only in fixed mathematical proportions; each combination thus formed, giving rise to new compounds, each having properties distinct and different from its parts and all other substances and combinations. Science teaches us to classify and arrange this seemingly confused mass of facts. It enables us to call them to our aid, when required, without loss of time, in searching after that which has a thousand times been proved false or useless. The science of the world is advancing, has advanced, and will continue to advance as long as civilization continues, and it is questionable if the world has advanced in any other way than through science, at once the cause and effect of civilization. It is science that teaches us how the earth is formed geologically, the relation and actual position of formations, the inutility of seeking for mineral wealth where it cannot be found, or sinking Artesian wells uselessly. It is science that teaches us the phenomena of springs and the principles of draining and irrigation; where we may expect to discover particular minerals, the art of extracting them from the interior of the earth with economy, without jeopardizing these great natural gifts, or the lives of those engaged in the undertaking. Mineral substances, having been created once and forever, are to be used, and not abused. A bad or unscientific commencement and exploration may make a deposit of infinite value as useless to future generations, as if it had never been created.

Our State contains hidden treasures of incalculable value, both metallic and combustible.—Science is absolutely necessary to guide all operations for their extraction. It is painful to consider how easily ignorance may consume the one, or render both valueless to posterity. Through science an agriculturally barren surface may be made to teem with an active happy population, and besides thus giving a support to hundreds of thousands on the spot, throwing into circulation large quantities of metals. It is science that enables us to give as much value to a few pounds of iron as the whole tobacco crop of Maryland would bring. It is science that teaches us the composition of mineral substances, their utility as material for manufacturing other substances of immediate and essential use; how what appears to be useless may be made of great value and necessary to the comfort of man; how to eliminate the pure metal from the ore; how to construct furnaces with economy and skill; how to build chimneys without smoking; how to ventilate for comfort, health and economy of fuel; how to build meat and ice houses efficiently. It is science that teaches us how to avoid disease and prolong life. Without science there is no culinary art; we learn from science how to cater to our wants and appetites without injury to health; how to make good and cheap bread, and succulent and substantial food from substances thrown away. It is science which teaches the nature of the soil; its composition; what produces its

barrenness, and what we should add to improve it; the nature and value of manures and other fertilizers, and the climactic influences. In fine, it is science that presides over all the doings of the farmer, no matter how illiterate he may be; whatever of farming knowledge he may possess, that little is science; science that tells him how to construct and to run the plough; science that governs all his operations. The blacksmith, the wheelwright and machinist, etc., draw largely upon science, which, indeed, as I have said before, is the main spring, the presiding influence over all the arts.

It may not be known to many that the invisible organic world is infinitely more important in amount than the visible. It is science that teaches us that the sea, all water, the air, and earth to some depth is alive with incalculable myriads of organisms, each possessing a perfect and distinct vitality; taken separately, they are insignificant, but produce gigantic and wonderful results in the mass. Science tells us, that the decomposition of an animal yields an amount of organic matter which is evolved into gases that float in the atmosphere, or are dissolved in water and thus fall down in dews and rain, and give fertility. Here is an abundant source for the supply of ammonia and phosphoric acid, which are considered so important to agricultural pursuits. It is science that teaches us how to draw from these immense natural reservoirs and concentrate the gifts which heaven has vouchsafed to us; science that teaches that light, heat and humidity are the great generators of vitality, and that if we shade our land, as is done by the pea, clover etc., it acts as a fertilizer, by preventing evaporation and inviting colonies and plantations of invisible organisms, which produce fertility.

Thus in all the pursuits of life, whether we study health, wealth or comfort, science is an unerring guide, and the want of it a fruitful cause of loss, disease and discomfort. To illustrate this position, I will refer to two existing evils which are wide spread and disastrous in their effects, and to which a proper knowledge of science would long since have put an end. The first instance is on the score of health. We have all long known and felt the very disagreeable, and to some persons insupportable effect of the heat of the stoves generally used in our apartments, to obviate which, water is placed upon them, etc.; but few seem to know (or if they do, are culpably indifferent to the fact,) that it is not only disagreeable, but highly deleterious to health and destructive of life, especially where anthracite coal is used, and much of the ill health, so proverbial among Americans, may be traced to this cause. Now, if those who make our stoves had the advantage of scientific instruction, they would know that cast iron is always very impure, and with few exceptions contains sulphur, arsenic, carbon, phosphorus, etc. When the cast iron is heated, (and the more intense the heat in a proportionate ratio, the greater the effect,) the hygrometric humidity, always present in the atmosphere, is decomposed; the hydrogen, one of the constituents of water, combines with either or all the above named substances, forming sulphuretted, arseniurated, carburetted, and phosphorated hydrogen gases, which poison the atmosphere, and are thus inhaled. Their effects are always sensible and, at times, insupportable, and even when so minute as not to be de-

tected by chemical investigation, are still sufficient to cause the most lamentable effects and even death. Arseniurated hydrogen in particular is so active a poison that it is almost impossible to say how small a proportion would produce death; and yet to these fatal influences we are, through interest and fashion, fostered by ignorance and false notions of economy, constantly exposed.

Another instance, even more general in its effects, since it touches the pockets of every individual in the nation, is to be found in our currency. It has been known for many years that our silver coin is constantly flowing out of the country, and going out of circulation. To prevent this, government has had recourse to debasing the coin; but even that was insufficient, and the constantly recurring want of a sufficient silver currency has given rise to enormous issues of small bank notes. Now, for the cause of this mysterious disappearance. All, or most silver—particularly that of Mexican and South American origin contains gold. The mints of European nations being in the hands of scientific men—those governments being fully aware of the value of scientific knowledge in that position—this gold, when existing in sufficient proportions or importance, is abstracted for the profits of governments before the silver is thrown into currency. In the United States, where a different state of things exists, those engaged in our mints, either from want of knowledge or indifference to the interest of our country, have coined the silver without any attention to this fact. The consequence is that it has been found profitable to purchase our silver coin even at a premium, ship it to Europe where it pays a profit to separate the gold. Even the sweepings of the mints of the United States are so valuable that they are carefully saved, barrelled, and sold for shipment to Europe, where the small quantities of the precious metals contained are profitably separated. These facts I learned when a student in the Royal mint of France, many years since; and when in an official position in Belgium, some years ago, I had occasion to see large amounts of our silver coin, fresh from the die, undergoing, in the mints of Belgium, the operation for separating the gold, and when recalled by my Government, I was offered the agency for purchasing and collecting it for shipment to Belgium.

I might extend these suggestions to any length, did I not fear fatiguing, but I will not dwell longer upon this branch of the subject.

It may be interesting, and is certainly not irrelevant that I should mention here some facts illustrating the use of science as an aid in the practical business of life, for which I can personally vouch.

When a member of the Royal School of Mines of France, Mr. Pierpoint of New York, put into my hands a specimen of iron ore, which, he stated, existed in large quantities in that State. Furnaces had been erected, and a large amount of capital had been expended for treating the ore. It was smelted, but the iron obtained was from some unknown cause, too indifferent to be used. The furnaces went out of blast, and they either had, or intended abandoning the undertaking at a large loss of capital. I examined the ore given me, and to my surprise found the result of the first essay to be a natural steel. This gave increased energy to the undertaking, and I have understood since that an immense business soon sprung up in manufacturing scythes, axes, etc.

To come to our own State,—Mr. Ed. Patterson, of Balto., discovered a variety of iron ore, which baffled the best efforts to treat. Half a ton of the ore was barrelled up, sent to Havre, and thence to the School of Mines in Paris. I made an examination of it, and found it to be titaniferous, and forwarded the result, together with the mode of treatment, to Mr. Patterson, which was successfully put into practice, and as I have heard greatly to the pecuniary advantage of the proprietors.

On my return to the United States, I was invited by his brother, Mr. Geo. Patterson, to visit his estate, situated in Howard county, and near Sykesville, for the purpose of making a scientific reconnaissance of the surface indications of his fine farm. I went there, and gave Mr. Patterson my views. I must mention that, at that time, according to the best of my recollection, no idea of the existence of copper there was entertained by any one. After a long absence in Europe, I met Mr. Patterson, who told me that my statements had been verified, and that a shaft had been sunk, from which they were extracting quantities of valuable copper ore. I have visited the locality since, and found the operations in progress.

In some of my geological examinations, I found, particularly in Jefferson Co., Va., strata of lime stone, and on analyzing them, they proved to be natural hydraulic cements, which have been profitably manufactured with great advantage to the community.

Far up in the interior of Carolina, where mineral fertilizers appeared to be wanting, I discovered a large formation of decomposing felspar, which, when added to the impoverished surface soil, greatly increased its fertility, and I have not a doubt that it still is, and will continue to be used as a fertilizer.

These are few among many instances which have occurred to me, where science came to the aid of practice, and I doubt not that all who have made it their study, could give many similar cases.

The success and value to a country of such an institution as we are engaged in trying to found, is neither doubtful nor experimental. They are in successful operation all over Europe, even in Russia, and have everywhere aided largely the advancement of the useful arts and sciences, but they have been generally founded and sustained by government. It remains for us to show that a free and enlightened people realize their wants, and are able and willing to supply their deficiencies.

It must, I think, sir, be apparent to all, even from the few cursory and hasty remarks I have set down, that such an institution as the one proposed, cannot but be of the highest importance and utility to our State, even in a pecuniary point of view, did it never return a cent of the money expended. But in my letter to Mr. Bowie, which you do me the honor to refer to, I said that such an institution, if properly organized, might be made not only to support itself, but prove to be as good and safe an investment as any in the State.

I still think so, and in proper time and occasion, I am willing to give my views and aid in carrying out the enterprise, proud to have an opportunity of associating my name with so noble a monument of the intelligence and public spirit of my fellow citizens.

Very respectfully,

Your obedient servant,

THOS. G. CLEMONS.

Jas. T. Earle, Esq., Pres. of the Md. State Ag. So.

VIRGINIA STATE AGRICULTURAL SOCIETY.

The annual exhibition of this Society was held during the last days of October and first of November, and was in all respects equal to the most sanguine anticipations of its friends. It is stated by the Richmond Whig, that on the opening of the Show, from "morn to evening, the largest assemblage perhaps ever congregated in or near Richmond, thronged the various avenues of the enclosure. Main street was imaginatively converted into a torrent of human beings, vehicles and horses, pouring in the direction of the great show. And it was indeed a great, a creditable exhibition, far surpassing, in our judgment, either of its predecessors. While admitting, however, the vastness, the indisputable success of the agricultural, horticultural, and stock display, we must say that the moving mass of spectators was to us the most attractive feature of the exhibition. We do not believe that the sun ever shone upon a more lovely collection of women—the fair daughters of Virginia—than those we had the infinite pleasure of observing yesterday."

We give in this number an abstract of the report of the Executive Committee, of the operations of the past year.

THE FARMERS' ASSEMBLY,

Comprising the representatives of the members of the Society, (the latter having been found too unwieldy a body for deliberative purposes), also assembled at the Capitol in Richmond, at the same time, and elected the Hon. Wm. C. Rives, as President, and R. W. N. Rowland, Esq., of Albemarle, Secretary. On taking his seat, Mr. Rives said:

Gentlemen.—I desire to express my very deep and unaffected sensibility of this mark of your favor and confidence, in the unexpected call to become your presiding officer. I say, without the slightest affectation, that I do not feel worthy of so exalted a position, when I see many others around me, who have rendered distinguished services in the great cause of Agriculture; but since it has been the pleasure of my brother farmers to bestow upon me this evidence of their favor, I shall consider it a thorough admission into the family of farmers of Virginia. However unworthy, be assured that I shall do whatever I can, compatibly with my limited experience as a presiding officer, to assist you in the accomplishment of the great work for which you have convened, and of my anxious desire to fulfil the expectations and promote the interest of the agricultural community.

After completing their organization, and transacting some unimportant business, the Assembly took a recess until the afternoon.

Evening Session.—The report of the President of the Agricultural Society was read. It is a document of considerable length, and concludes with the following propositions:

1st. The establishment of an agricultural department or College, at the University of Virginia, to consist of three professorships.

2d. A Professor of Agricultural Chemistry, of

Botany, of Vegetable Physiology, Mineralogy, Geology, Dimalology and Meteorology.

3d. Of Veterinary Practice and Surgery, of comparative Anatomy of Natural History of quadrupeds, birds, insects, &c.

Mr. Macfarland, of Richmond, moved that the report be laid on the table and printed—adopted.

On Motion of Mr. Newton, of Westmoreland, the thanks of the Assembly were tendered to the President of the Society for the zeal, efficiency and ability he has displayed in discharge of the duties of his office.

The Assembly then adjourned until the following morning at 10 o'clock.

MUNIFICENT DONATION.

An interesting meeting of the Assembly, was held on the 1st of November in the Hall of the House of Delegates. The Hon. Wm. C. Rives presided.

The Speaker laid before the Assembly, the following communication from Philip St. George Cocke, Esq., President of the State Agricultural Society.

RICHMOND, Oct. 30, 1856.

To the Hon. Wm. C. Rives, Speaker of the Farmers' Assembly:

SIR:—I have the honor to transmit herewith a communication from the Rector and Visitor of the University, and a resolution of the Visitors thereof, referring to the establishment of a school or professorship of agriculture in the University.

I congratulate you upon the receipt of these papers in time to lay them before the Assembly at your present session; and that neither the disposition nor the power is now wanted on the part of the University, to co-operate with our Society in initiating a scheme of such vast importance to the true and permanent welfare of our State.

My views upon this subject are before the Assembly in the paper which I have already had the honor to communicate—and I can only repeat that it is my conviction that action in this great cause is demanded by every consideration which can appeal to the patriotic hearts of our farmers.

The initiative must, it seems, be taken by the Assembly, if we would avoid tedious delay. As a beginning, I propose to bestow twenty thousand dollars of the bonds of the University, bearing six per cent. interest, for which, by law, its annuity is pledged, towards the endowment of an Agricultural Professorship; reserving the right of nominating the Professor, subject to the approval of the Visitors of the University, and at my death, the nomination of the Professor to be made by the Farmers' Assembly, subject to the like approval.

I desire furthermore, to enjoy the privilege of appointing two scholars, to be educated free of tuition fees or charge, in the proposed school, and that this privilege shall rest at my death in perpetuity in the Farmers' Assembly.

This donation—which I am prepared to make as soon as the steps to establish the professorship or school have been taken by the Farmers' Assembly and the Visitors of the University, and the same has been put upon the permanent legal footing of other professorships therein, and the professor appointed—will leave much undone in completing the proposed school and providing the means of general agricultural instruction; and I

indulge the hope that State and private liberality will take up and complete the glorious enterprise.

With the highest respect,

I remain, your obedient servant,

PHILIP ST. GEO. COCKE.

On motion of Mr. Macfarland, of Richmond, the following resolution was unanimously adopted:

Resolved, That for his munificent donation to agricultural education, and for the wise and patriotic dedication of it, Philip St. George Cocke, Esq., is entitled to the enduring gratitude of this Assembly, and of all good citizens, and that the Speaker communicate to Mr. Cocke the grateful acceptance by this Assembly of his noble benefactions, and the high esteem and respect entertained for him.

On motion of Mr. Macfarland,

Resolved, That the munificent donation of Philip St. George Cocke, towards the foundation of the Agricultural School in the University of Virginia, be and is hereby accepted.

With such a noble example as this before them, may we not hope that some of our Maryland landholders will immortalize their names as Mr. Cocke has done, by a similar donation to our contemplated college? We could name several gentlemen, whose ability to do so, are acknowledged by all men, and who probably contemplate such a step at their demise, but in the meantime how much more gratifying to the friends of our work, and to the successful and immediate operation of the plans of its friends, would be the effect of such a munificent donation to it at this time.

ANOTHER NOBLE SON OF THE OLD DOMINION.

From the Clarksville (Va.) Tobacco Plant, we copy the following evidences of liberality on the part of the people of Petersburg, and of the President of the Union Society of Va. and N. C.

THE AGRICULTURAL FAIR IN PETERSBURG—LIBERAL OFFER OF MR. JAS. C. BRUCE.

It is well known to our readers that, at one time, it was announced to the public, that every effort on the part of the Executive Committee to raise the requisite funds for holding a fair in Petersburg had failed, and that consequently no fair would be held. It is equally as well known, that immediately subsequent to this announcement, the citizens of Petersburg, animated by that spirit of liberality, and exercising that indomitable resolution, so highly characteristic of the population of that city, at once set themselves to work, and, with a promptness worthy emulation, raised the funds required to hold a fair. Accordingly the fair came off on the 21st, 22d, 23d and 24th days of this month, and in despite of the very many untoward circumstances, the exhibition was in most particulars a magnificent one.

Not having space to descend to particulars, we can nevertheless not drop this subject without a word of comment upon the liberality and public spirit of the distinguished President of the Society, James C. Bruce Esq., of Halifax. Manifesting from the very incipient organization of this Society an interest in it little less than that of a parent for his offspring, Mr. Bruce at this annual meeting made a proposition, which should endear him to the hearts of every citizen of Petersburg, and should excite towards him the liveliest gratitude.

in the breasts of the agriculturists of the whole State, if not of the confederacy. He proposed to donate the sum of \$10,000 to the Model Farm of the Union Agricultural Society, provided the Common Council of Petersburg would appropriate \$2000 annually for the purpose of holding a fair, at the Fair Grounds near that city. If a proposition of anything like equal liberality has been made by any one of its members to any similar organization, it has either never come within our knowledge, or if so, has escaped our recollection.

To secure the benefit of this munificent offer, only one condition remains to be fulfilled. The people of Petersburg, in their capacity of voters, have to be consulted. An early day is fixed upon to take the vote. As to the result, we are pleased to confess, that no doubt has as yet entered our mind. A town of much less public spirit and enterprise would scarcely decline such a bounty.—Petersburg, we feel every assurance, will not.—Accepted, and the Society, in all its departments, is put upon a sure and permanent basis. Henceforth no doubts will exist of the recurrence of the annual exhibition. And the Model Farm, one of the most useful and valuable adjuncts of the Society, may be considered, not as heretofore an experiment, but an undoubted success.

With respect to this Model Farm we have a word to say. If any industrial art in the world is dependent for its successful pursuit upon practical maxims, gathered from experience, it is agriculture. If any calling has, during the few years past, advanced more than all others in the elements of improvement, by reason of the new lights of experience shed upon it, it is this. Experiment is emphatically the heart, the vital centre, from which agriculture derives its present vigor of growth, and from which it may expect to acquire new strength continually, until it shall overshadow and control every other pursuit.

It is, therefore, plainly to the interest of agriculturists, that experiments should be constantly making. It is no less evident, that they should be made systematically, and on the most economical terms. To effect these ends the Model Farm was established. Its origination was through Mr. Bruce, and its perpetuity may be considered as fixed beyond chances by his recent liberality.

Hurrah for Petersburg, and the Union Agricultural Society!

NEW CASTLE (DEL.) AGRICULTURAL SOCIETY.

At the annual meeting of the Society held on first November the following gentlemen were elected officers thereof for the ensuing year, viz:

For President—Brian Jackson.

Vice Presidents—John C. Clark, T. Jenifer Adams, Giles Lambson, Barney Reybold, M. Ocheltree, John Jones, D. W. Gemmill, John Wales, Chas. I. Dupont, Anthony M. Higgins and Sam. Canby.

Corresponding Secretary—Geo. P. Norris.

Recording Secretary—Geo. R. Townsend.

Treasurer—Chas. W. Howland.

Counsellor—John Wales.

Directors—Dr. J. A. Brown, I. S. Elliot, A. H. Adams, Richard Jackson, Henry L. Tatnall, Zaddock Townsend, J. W. Andrews, Wm. D. Clark, Ed. T. Bellah, H. C. Burton, and Geo. Z. Tybout.

Samuel Canby Esq., tendered his resignation as Treasurer, which was accepted, and Charles W. Howland was elected, as above. The thanks of the Society were tendered to Mr. C. for his services as treasurer.

For the American Farmer.

CLASSICAL LITERATURE CONDUCIVE TO AGRICULTURAL KNOWLEDGE.

"O Fortunatos nimium sua si bona norint
"Agricolae." Virgil.

In these days of Commercial Colleges *et id omne genus*, classical literature seems to be considered of no practical utility to the American student. Persons totally unacquainted and consequently wholly incapable of appreciating the value of it, seem to consider it a useless waste of time to devote so much attention to Latin, since by it they acquire no real knowledge but only a *dead weight of words*, burdening the memory to such an extent as to make it powerless for other and more useful knowledge; this if I mistake not, is the strain in which they go on. They are entirely ignorant of the fact that the Latin is the fundamental language of all those of the South of Europe, and that from it a most powerful analytical habit and etymological knowledge are derived, invaluable to the student in after life. From the study of the Latin authors alone, the germ of pure eloquence is to be derived; and from the perusal of their historians, the student sips up almost involuntarily rhetorical figures, purity of language, and the sublimity of simplicity, whilst at the same time he lays up an immense store of historical and general knowledge, to be drawn from at pleasure through after life. True it is, nevertheless, that the study of Latin, as pursued at many of our Colleges, is not of paramount importance; for how few of our young men, who have received a collegiate or liberal education, are able to construe, unassisted by an *Ordo Constructionis*, a single sentence. If a little of the time devoted to the literature of the Paul de Kock and Eugene Sue school in order to acquire a style, was spent in mastering the difficulties of the Latin construction, a great point would be gained.

There are many data in Agriculture as well as in the arts pertaining to the sciences, which are believed to be of modern date, but which upon research will be found to have been in successful practice even before the Christian era. The Ancients knew from experiment the value of manure to the soil what we do scientifically from the instructions of Liebig, Johnston and others.

Virgil—from whose works I will quote in order to show the state of agricultural knowledge in his day—was born in Mantua in the year 69, *Ante Christum*. He was an humble tiller of the soil, and must have kept pace with the march of agricultural progress, if we are allowed to judge from the knowledge of everything connected with farming evinced by him in the poem entitled the *Georgica*.

The *Georgica* is considered, by critics the most finished of his poetical productions, and can be read with great pleasure, if not profit, by the agriculturists of the present day. I will here merely select a few sentences, the tenor of which I believe will be instructive to the main body of intelligent agriculturists, the bone and sinew of the land.

Of ploughing, the most important operation in preparing the ground for most crops, he says in the *Georgica*, Liber I. linea 42:

*Vero novo, gelidus canis cum montibus humor &c.**
"In early spring, when the melting snow glides down from the mountains, and the crumbling glebe is unbound by the Zephyr; then let my steer be—"

* A translation as literal as the idioms of the language will allow, is given for the benefit of those not understanding Latin.

gin to groan under the deep pressed plough, and the share, worn by the furrow, glisten."

Here he describes accurately the time, the state of the soil, and in a single word shows the advantages to be derived from deep ploughing. And a few lines farther on:

At prius ignotum ferro quam scindimus aquor, &c.

"But prior to cleaving an unknown plain with the ploughshare, let us learn the winds and character of the climate, the agricultural practice of our ancestors and the culture and nature of the soil; what each region will produce and what refuse."

What more general instructions could be compressed in a less space? He makes a distinct reference in four lines to as many points to be carefully noted; the climate, the soil, what it has previously produced and what it is still capable of producing.

Ergo age terre, &c.

"Come, then, let your sturdy steers straightway turn up a soil rich from the first month in the year, and let the dusty summer bake the scattered clods with mature suns. But if the soil is not fertile, it will suffice to turn it up with a light furrow about the time of the rising of Arcturus;† in the former case, lest weeds obstruct the joyous crops; in the latter, lest the scanty moisture forsake the barren sand."

Alternis idem tonsas cessare novalis, &c.

"Likewise allow your lands after harvest to lie fallow every other year and the exhausted field to harden by repose" or else, he intimates, change the crop every season.

Sed tamen alternis facilis labor. arida tantum, &c.

"Nevertheless the alternate labor will be easy (on the soil) provided you be not backward in saturating the parched soil with rich ordure, or in scattering sordid ashes upon the exhausted lands." Where do we find a greater advocate of the advantage of manure and of allowing the lands to remain uncultivated every other year, or if that is incompatible, of varying the crops? Surely, if portions of Dryden's famous poetical translation were read to some of our progressive farmers, they would believe it to be a poem composed in our own times, to awaken the sluggish propensities of some of their co-laborers.

Sæpe etiam steriles incendere profuit agros, &c.

"It is also often of use to set fire to barren lands and burn the light stubble in crackling flames." He also refers, *en passant*, to harrowing, cross-ploughing and the dragging of hurdles over the clods as beneficial, in a high degree, and to most of the agricultural implements, their shape &c., with cautionary precepts in regard to threshing and the extermination of vermin.

Semina vidi equidem multos medicare serentes, &c.

"I have indeed seen many sowers prepare their seeds artificially, steeping them first in saltpetre and the black lees of oil, that their produce may be larger in the deceptive pods. And though to hasten their growth, they were soaked over a slow fire, after long selection, and proved by much care, yet I have seen them degenerate, unless human industry culled out with the hand the largest every year. Thus all things naturally hasten to decay, and gliding away, are insensibly driven backward; not unlike him who rowing his skiff with much ado against the current, by chance slackens his arms when the tide hurries him headlong down the stream."

† Arcturus, a star near the tail of Ursa Major. In Virgil's time it rose about the middle of September.

The selection by hand of the best seeds, and the soaking of them in tepid water, is recommended, with continual vigilance, the momentary relaxation of which may result in loss or deterioration, which he exemplifies by a figure of much force and strength, but in plain prosy vernacular, compared with the exquisite finish of his verses, is far from doing him justice.

He describes, in the most poetical language, the signs (as known in those days) of windy, rainy and fair weather, some of which the mariners of to day will declare are perfectly correct. These words of his regarding farming operations should be printed in golden letters, invaluable as they are, were they followed in what they advise:

Exiguum colito. Laudato ingentia rura.

"Commend large farms; cultivate a small one," with the qualification, I will add, implied by him: A small one well, in preference to a large one badly. But I fear I am too prolix, and I will conclude with a felicitous description of the industrious agriculturist and his family during the wintry season:

Agricola incurto terram dimovit aratro, &c.

"The husbandman cleaves the earth with a crooked plough: hence the labors of the year; hence he sustains his country and his little offspring; hence his herds of cattle and deserving steers. Nor is there any intermission: either the year abounds with apples, the increase of the flocks or the sheaves of Ceres' stalk, loading the furrows with increase and over stocking the barns. Winter comes; the Licyonian berry (the olive) is pounded in the oil presses; the swine come home gladdened with acorns; the woods yield the arbutes, and Autumn piles up her various productions, and high on the sunny rocks the mild vintage is ripened. Meanwhile the sweet babes twine round their parent's neck: the chaste family preserves its purity, the udders of the cows hang full of milk, and the fat kids playfully contend together with butting horns on the cheery green."

I may at another time revert to this fruitful subject. To captious criticism I will merely address the words of the poet, Horace:

Si quid novisti rectius ipsius, Candidus imperti, si non, his utere mecum,

Which is patly translated as follows:

"If a better system's thine, Impart it freely, or make use of mine."

M. IGNATIUS RYAN.

Denton, Md.

IMPORTED SOUTH DOWN SHEEP—In the report of the Committee on Imported Sheep, published in our last, the following paragraphs were accidentally omitted by the printer, which we exceedingly regret as several of the animals were owned by our late excellent President:—"There were but two South Down Bucks exhibited, which were very beautiful, for which they have awarded the first and second premiums of \$30 and \$15 respectively to their owners, Thomas Betts E-q. of N. J.

"SOUTH DOWN EWES.—But three were offered, which were very superior, to which they have awarded to each the premium of \$30, \$15, and \$10, respectively, and take great pleasure in saying they were the property of the President of this Society, James T. Earle, Esq.

SUPER-PHOSPHATE OF LIME.

HOWARD CO., Oct., 1856.

To the Editors of the American Farmer:

SIRS:—What are we farmers to do? Through the medium of your widely extended and circulating journal, the intelligence of "Guano Excelled by De Burg's Super-Phosphate of Lime," is being disseminated broadcast over the land, and all professedly for the benefit of "farmers," with legions of certificates attached by the vendors to their advertisements; so plausible do they appear, and so fascinating, that many of us had it in contemplation to discontinue the use of "guano" since its high price, and take to De Burg's Super-Phosphate of Lime. But behold! what do we see and read in the "Farm Journal and Country Gentleman," printed in Albany, N. Y. That paper under their issue of 16th Oct., 1856, says, Professor Samuel W. Johnson thus speaks:—

"Last summer 17 analyses of Super-Phosphates, on 8 different samples, from five manufactories, were made in the "Yale Analytical Laboratory;" either under my eye, or by my own hands; of these five brands, only two, viz: De Burg's No. 1 Ammoniated, and Coe's Improved, were manufactured with any respectable combination of knowledge and honesty—two indispensable requisites for this kind of business. De Burg's contained but $2\frac{1}{2}$ of soluble phosphoric acid."

In face of these facts, Professor Samuel W. Johnson says, "he is a bold man who now buys Super-Phosphate of Lime." What are we farmers to do? A FARMER.

N. B.—If farmers are deluded or imposed upon through the instrumentality of your valuable journal, (which every man owning fifty acres of land ought to take,) by any spurious article advertised therein, when so ascertained, we hold you morally bound to give us the antidote by investigating and exposing the same to the farming community. FARMER.

It will be remembered, that about a year ago, in consequence of the advance in the price of Peruvian Guano, and the impositions practised upon the farmers in connection therewith, we called upon our readers to give us the result of their experiments with the various kinds of guano, phosphates, &c., in order to test the value of each as far as possible, to take the place of the former, and have published every line which has been furnished us upon the subject. Our correspondent draws particular attention to one of the various manufactured manures, and quotes from some of the Northern Journals, to show that nearly every one of the various Super-Phosphates which had been put to the test of analysis, proved to be comparatively worthless, except the very one he has designated, and that one is shown to be not much better than the others. But the fact that inferior or spurious compounds are sold at the North, should not be considered a valid reason why all those sold in our city should be of the same character—for the particular article alluded to by "A Farmer," has had the safest test that could be applied as to its value, in the experience of a number of the most respectable farmers of our own

and neighboring States, who, under their own signatures, with their post-offices attached, have given the results of their trials with this manure. In addition to this, the certificate of the Chemist of the Maryland State Agricultural Society, as well as that of the late Assistant to the State Chemist, are given by the agents of the manufacturer in this city, as to the quality and value of the article sold by them; and those agents, who are responsible and respectable men, have assured us and the public, that any lots which may be sent to them for sale in this market, that do not come up to the standard of value fixed for them, are to be, and in some instances where they have fallen short, have been refused and sent away from this.

We make this statement in justice to ourselves, called upon as we have been by our unknown correspondent, as well as in justice to all parties interested. In doing so, however, we would take occasion to say, that no editor is responsible for the advertisements published by him, except insofar as he may endorse the same,—the statements made by all advertisers of their goods and chattels of whatsoever nature and kind, must be received with that degree of credit which the character of the advertiser himself can give to them.

As before remarked, many respectable farmers have testified to the value of the article alluded to by our correspondent; but no doubt others have not enjoyed the same satisfactory results—and we have incidentally heard of instances of the kind—but this is also the case sometimes with Peruvian and other guanoes and manures.

We must acknowledge that we have been somewhat skeptical about these manufactured manures; still we see no reason why, by the aid of science, a compound cannot be prepared to suit the requirements of the soil—but solely from the very respectable testimonials which have been furnished in behalf of the article alluded to above, and based on practical results, we have been induced to believe it more reliable than most others which have come under our notice.

A VIRGINIA LADY FARMER.

We received from Miss J. E. Thomas, of Southampton Co. Va., a box of Peas, very similar to our Lady Pea, which are recommended as equal to the split Pea, as a material for soup; also some ground-nuts, said to be excellent for hogs, and several samples of corn, which were exhibited at our late show, and are highly creditable to Miss T. as a successful farmer. We have some of the peas and corn left, which we will distribute to applicants. Miss Thomas has not only shown her skill as an agriculturist, but also bore off the highest prize at our Show, for her taste and industry in embroidery, a most beautiful dress for an infant, which she authorizes us to present to the committee of Ladies who awarded the premium, to be disposed of as they may deem proper.

We copy the following article from the *Richmond (Va.) Whig*, of a late date, a journal, by the by, which we have frequently noticed, has stood up most manfully for the farming and planting interests in the Old Dominion, against the efforts of speculators :

WHEAT-GOUGING AND GRINDING!

We hope, after so long an interval, we may thrust our spoon into the rich porridge of the Wheat Speculators without the imputation of intrusion. These gentlemen, for nearly three months, have been enjoying a wonderfully rich feast at the poor farmers' expense. Cicero made some allusion to the very significant grin with which Roman Soothsayers were wont to greet each other, when passing in the streets. They were conscious of the humbuggery they were practising upon their dupes, and they could not repress the grin of triumph when facing each other. We do not know that our Wheat Speculators give the same outward signs of joy which characterized their Roman prototypes; but they would be amply justified in doing so. Since the first of August they have had every thing their own way. "*Wheat dull and declining*," has been the grateful bulletin that greeted their ears every morning; and the more depressed the market, the greater the rush of wheat and the more eager the farmers to be victimized.

While this game has been going forward, we believe it has been the conviction of every well-informed man, that as soon as the temporary glut was over, an important advance would take place. We all know that the stocks in Europe, when the late harvest commenced, were shorter than they have been for many years. We all know that the crops in England, France, Spain, Portugal, and Italy, are below an average, and that the four last, instead of being exporters of grain, will be compelled to import to prevent starvation. We all know that the Danubian Provinces and the coasts of the Black Sea, last year at seeding time, were occupied by and overrun by invading armies; and it is not natural to suppose, that under such circumstances, anything like an average yield could be anticipated. We all know that the first and last portions of the English and Scotch crops were reaped in rain; that the grain has been thrown upon the market in a damaged state, and that rotten wheat has been regulating the price of our wheat. We all know that the south and centre of France was deluged with water in the Spring—that the crops were extensively destroyed, and that the Government, while concealing the extent of the damage, has been, and is still diligently engaged in importing. Spain, Portugal and Italy, as well as France, have repealed all duties on grain, and thereby invite its free importation from all quarters. In the face of these notorious facts, and with the knowledge, that there is a very small excess, if any, in the German States, the farmers of this country, who alone have a small quantity to spare, are confronted by a universal urban combination, at home and abroad, to depress the price of breadstuffs. All the people of all the cities, towns and villages, of all the manufacturing districts throughout the world, being consumers, are natural members of this natural combination against the agriculturists. Nearly all the newspapers in the world, being published in the midst of these non-producing communities, breathing

the consumptive atmosphere of cities, and each eager to save a quarter of a dollar in the price of a barrel of flour, sympathise with the communities in which they live, and are active advocates for low-priced bread. In addition to these, we have the professional speculators, ever on the alert, and eager to depress prices until they have got the last bushel out of the hands of the farmers.

This great and formidable combination, extending throughout the world, the farmers have at all times to contend with. The contest is usually more furious, and, to the farmers, more disastrous, just after harvest;—for unfortunately for them, in their eagerness to dispose of their wheat, they create a glut, and put themselves at the mercy of the speculators. According to our observation, the months of August, September and October, in this latitude, are generally the worst months in the whole year to throw wheat upon the market. For, independent of the great quantities then brought forward, if there be a foreign scarcity, that fact is studiously denied, or obfuscated, and the effect of the foreign demand is postponed until the farmers and their wheat have parted company.

All that we can do with respect to this general combination against farmers, is to put them on their guard in regard to it. But there is a special combination against them here at home, to which a moment's attention may be directed. In former times, and further back than the memory of man runs, wheat was a cash article; and in speaking of the value of anything, you could not bestow upon it a more superlative commendation than to say, "*it is good as wheat*." All this is now changed. Our dealers have interposed a *four months' paper*, and wheat is no longer as good as wheat by the lapse of four months, and the uncertain fate of notes, which may or may not be paid at maturity. We say nothing against this four months' paper—it may be good as wheat; but we know when big houses break, as large rivers sometimes overflow their banks, the devastation is just in proportion to the magnitude of the operations. But conceding the paper to be good beyond question, it does not bear interest, and the effect of its introduction is to chouse the farmers out of two per cent., or a sum exceeding \$100,000—a sum transferred without any consideration from their pockets to the pockets of the millers. This device is of only four or five years' standing, and we suppose was brought about by a combination among the Richmond dealers.

Another innovation of still more serious detriment to the farmers, traces its origin to a few months back. We refer to the difference of ten cents between red and white wheat. On the first of last August the difference was, as it had been for time immemorial, only five cents. Suddenly an announcement was made that the millers in future would make a difference of ten cents. We can scarcely be mistaken in concluding that this result was the effect of a direct agreement and combination among the millers. If these gentlemen can thus, by agreement among themselves, transfer from the pockets of the farmers to their own pockets, some three hundred thousand dollars, what limit is there to their power? What other still more grinding innovation may they not introduce next year? Of what use is the Agricultural Society, if it sits by with folded arms and witnesses these gouging operations? Why should it not form combinations against combinations?

THE GRAPE CULTURE.

The fear has recently been expressed that the Grape crop for the present year, has been a failure, to a very considerable extent—but we learn from remarks made by Mr. Longworth, of Cincinnati, that the injury sustained by the unfavorable season, will be made up by the increase in the amount in cultivation this year, which will fully counter-balance the deficiency in the yield.

An intelligent writer, in Cincinnati, said to be one of the most eminent vinegrowers of the Ohio valley, in alluding to this subject in a letter to the N. Y. Journal of Commerce, makes the following remarks, which we deem of much interest to our Southern friends:

The grape crop in the Ohio valley this year, was a very small one,—probably not more than an average of 80 to 100 gallons to the acre. The severe winter injured many of the vineyards seriously. Some of the vines were killed down to the ground, and about half the buds in others were destroyed. The "rot" or mildew, also injured some of the vineyards very much.—But a bad season with the grape, like other fruits, must be expected to occur occasionally. Our experience thus far has proved that the grape is about as reliable a crop as the apple, and perhaps more so.

A fair average crop for a series of years is found to be 250 to 300 gallons to the acre, in well cultivated vineyards in the Ohio valley. The cost of producing this crop will not exceed \$50 to \$60 per acre, and less, with proper economy. We plant the vines usually 3 by 6 feet apart in the rows, and an acre will contain 2,420 vines. Warm hill sides, or the tops of hills are generally selected for vineyards. Any undulating land is preferable to level, as it affords better drainage. The grape wants a porous soil, with good under drainage. A tenacious, wet subsoil, or blue clay, or hard pan, will cause mildew and rot, after the 4th or 5th year, and should be avoided.

This cultivation is largely on the increase all over the West and Southwest, wherever the conditions are supposed to be favorable; and the consumption of the wine is fully equal to the production.

Thirteen years ago, when the writer commenced planting, the price of wine was lower than it is now. It was also inferior in quality to that made since, and but little known. Now the character of our native wines is well established, and those who have acquired a taste for them will use no others. Their cheapness and their purity, have helped to introduce them into general use in some sections of the country, and the failure of the grape crops in Europe, will add to the demand for them. Viewed in every aspect—moral and economical—our native wines may be considered a most valuable addition to the agricultural products of our country.

It is now estimated that there is in vineyard culture, over 4,000 acres in the Ohio Valley. About half this quantity is in the vicinity of Cincinnati, and probably three-fourths are now bearing. In the Missouri Valley there are 700 to 800 acres; and in the upper Mississippi Valley 500 or 600 acres.

In Tennessee, Alabama, South Carolina and Georgia, several vineyards of the Catawba grape,

have lately been planted, with flattering prospects, thus far, of producing far better crops than those of the Ohio valley. How they will hold out, has yet to be tested. The mildew and rot, our great enemies in vineyard culture, seldom trouble the first two or three crops, but I have little doubt that the uplands of North Carolina and Georgia will be found more favorable to the cultivation of the Catawba grape than any other section of the United States.

NORTH CAROLINA WHEAT.

The best sample of seed wheat which came under our observation since the last harvest, was a lot raised by J. C. Johnson, Esq., of N. Carolina, the blue stem white wheat, raised from seed bought in this city. We were reminded of this fact from recently noticing the following:

At the meeting of the Scientific Association in Albany, this summer, some private conversation ensued upon the comparative merits of the grains grown in the West, North and South. It was observed that Southern flour had largely the preference in the West Indies and South America, on account of its being dryer and keeping better in hot climates.

A gentleman who attended the World's Fair in London, at once remarked that the finest flour he ever saw was made of North Carolina wheat, and ground at mills in New York. Being solicited to submit the observation to writing, Dr. Elwyn, of Philadelphia, well known for the interest he takes in agriculture and every thing connected with the useful arts, at once drew up a certificate, of which the ensuing is a copy:

"I have been desired, by Dr. Gibbon of North Carolina, to record the following fact as interesting to the wheat growers of that State. While acting as chairman of the committee on articles used as food, during the exhibition at the Crystal Palace, I was struck with the quality of bread offered for examination by Hecker & Brother of New York. It was the whitest and best I ever saw, I asked, being a farmer, the very natural question, as to where they procured their grain; and was told that the bread was made of flour from North Carolina wheat; and to my further astonishment, was also informed that, in their opinion, the best wheat in the United States was that of North Carolina. (Signed.) A. L. ELWYN.

Albany, N. Y., August 25, 1856.

☞ We have some very superior specimens in our office, of sugar beet, carrots and parsnips, from a friend near the city, who does "all things well," in the way of agriculture. They seemed to have searched the very depths of the soil, and have "sucked out no small advantage." The crop of ruta bagas, measured from a fraction over a fourth of an acre, is two hundred and thirty-seven bushels.

We understand moreover that these roots were planted in the *wrong time of the moon*, much in opposition to the will of the gardener. He concludes now however that the moon though a good institution in its way, is "all in his eye," as regards the growing of vegetables, and not to be compared with good manure.

SMITHFIELD, VA., Oct. 4th, 1856.

To the Editors of the American Farmer:

GENTLEMEN:—I send you herein one dollar—my subscription up to September, 1856. The September number of your valuable paper has not reached me, and as that of October is before me, I conjecture that the September number has miscarried.

When on a visit to my excellent friend, and justly distinguished farmer, Mr. John Q. Hewlett, of Baltimore county, a few days since, I saw the September number, and found some valuable suggestions, and I am anxious to profit thereby; so send me the September number as soon as you can.

The account of Mr. Hewlett's farm, in your June number, seemed to me to be extravagant, but upon view of the estate, I can bear evidence to the truth of your statement. I have never seen any land in so high a state of improvement, and the kindness of the proprietor and his lady was fully equal to the beauty and fertility of the soil—indeed it was the most pleasant visit of my life. I had the happiness of a visit to one other very highly improved farm, where I saw every thing that labor and good taste in agriculture could produce, and had extended to me a hospitality and kindness that I shall never forget; but shall remember with sorrow, that I am probably always to remain the debtor to that accomplished family. I am well aware that I never can bring my farm to a state of improvement one-half equal to those I saw in your State, but I am a zealous man, and *will try*. Your paper will help me greatly, I know.

Your obedient servant,

ARCHIBALD ATKINSON.

[The above from Gen. Atkinson should have appeared in our November No., but was overlooked. From personal inspection he is enabled to bear testimony to what we said of Mr. Hewlett's farming. So far from having given an exaggerated statement of the true condition of this farm, we knew that we by no means did the entire management of it ample justice. We wish that every young farmer among our readers could have the benefit of such a model for his frequent inspection.—Eds.]

For the American Farmer.

Whilst I believe it is generally conceded an immutable law of nature, that like produces its like, nevertheless, from observations I have made, I am induced to believe there are exceptions to this rule, some of which I will enumerate, for the elucidation of those better informed than I am.—First, upwards of thirty years since, a brother of mine was presented with a table spoonful of the most beautiful variety of wheat I ever beheld; it was repeatedly shown to me and others, before it was sown, and among which there was not a grain of chess or any other thing—it was sown in a garden where there had never been wheat, within the recollection of any one; it came up well, but during the winter, the hares found an entrance in the garden, and grazed down every spire of which save six; at curing time every spire grazed produced chess, whilst that not grazed, produced wheat of the variety sown. Again, the oak, black gum, persimmon and honey pod trees produce mistletoe, (a growth unlike either of the foregoing varieties of trees) and none others that I have ever noticed.

I am aware some entertain an opinion that it is propagated by birds; admit the fact, we ask from whence do they get the seed, as they are not the product of the earth, and inasmuch as birds light on all trees, and all trees do not produce it, it must be ascribed to some other cause. Furthermore, I presume every farmer has frequently noticed the tassel of his corn covered with a round grain, rather less in size than an early May pea. Last fall I discovered one more fully covered than I had ever seen before, hence I cut it from the stalk, and retained it until I commenced planting corn, when it occurred to me to plant it and see what it would produce, I did so, and herewith send you an ear of corn the product of the tassel seed, and a seed of the kind which produced the ear, the seed being the size of No. 2 shot, and the ear 8 inches in length with grains $\frac{3}{4}$ inch deep and $\frac{3}{4}$ inch broad.

RICHARD ROUZEE.

Mount Landing, Va. Oct., 1856.

The ear of corn and the seed from which it grew are received and answer accurately to the description of our correspondent.—[Eds.]

SALT AS MANURE.

In moderate quantities, well mixed up with the soil, salt is highly beneficial to the growth of potatoes. It is a well known fact that we are out of the true latitude for meeting with the best success in the culture of this estimable vegetable. Those who have eaten the freshly dug potatoes of Northern New York, Maine, and Canada, will not need to be reminded of the striking difference between the potato raised in the cool higher latitudes, and that produced in this warmer climate.

In this latitude, however, the judicious application of salt to the ground designed for potatoes, seems, by the cooling nature of the salt, and its susceptibility of drawing moisture from the surrounding atmosphere, to produce such a change in the character of the soil as to make it akin to the land of more northern latitudes.

All potatoes, to do well, however, in so low a latitude as Cincinnati, should be planted early. In usual seasons they should be planted late in February or early in March, and as they arrive at maturity, in June, they are thus enabled to obtain most of their growth in moderately cool weather. By this early maturity another advantage is also obtained. The same ground, especially when it has been previously slightly manured with salt, is in admirable condition for a crop of turnips, thus obtaining two crops in one year. We have never seen a more luxuriant growth of red top turnips free from every defect, and of most unexampled yield than we witnessed last year on ground where potatoes manured with salt had the same season been grown; the depredations of insects and vermin, usually so serious on the turnip crop, seemed to have been wholly prevented.

When farmers once learn the value of salt, the demand for it will be immense. Care, however, should be taken that an *over dose* is not given.—*Valley Farmer.*

GYPNUM.—Top-dressings of Gypsum on clover leys in spring are found to have a most marked effect, especially where the soil is sandy. The gypsum should be sown early in the morning, when the leaves are covered with dew; the fine powder adheres to the leaf, and is no doubt carried down into the soil. About two or three cwt. per acre is a sufficient dressing.

THE IMPROVEMENT OF GRASS LANDS.

The following judicious, practical remarks on an important subject, we copy from the *Genesee Farmer*.

In the improvement of grass lands, the first thing to be done is the removal of all stagnant water by means of thorough underdraining. Unless this is accomplished, the best of cultivation, seeding and top-dressing, will fail to produce their full effect.

When our meadows fail, from whatever cause, it is generally advisable to plow them up in the fall, and cultivate them thoroughly for two or three years, with corn, potatoes, or other root crops, manuring them heavily, and seeding down again when the white daisy and other weeds have been destroyed, and the old turf has entirely disappeared. If, however, the land is so low that it is not desirable to cultivate it with other crops, it may be plowed up in August, and well worked with a cultivator, harrow, &c., till a fine "seed bed" is obtained, not forgetting to give it a good coat of manure; if long manure, plow it in; if well decomposed, which is best, spread it on the furrows, harrow and cultivate till it is thoroughly incorporated with the soil. About the first of September, sow it with artificial grasses, and be not sparing of the seed; half a bushel of timothy, and half a bushel of red top, or other grasses in proportion is none too much.—Generally, by so doing, a fair crop of good hay is obtained the next season. This method of restocking worn out meadows has been practiced with much success by many excellent farmers in New England. Some of them recommend sowing clover with the timothy and red-top, in the fall, but we should be inclined to fear it would seldom survive our hard winters; unless, indeed, it were sown quite early, say in July or first of August.

We have seen meadows greatly improved by simply scarifying the sward in the fall by means of a heavy harrow, and then sowing from eight to sixteen quarts of timothy, red-top and rye grass seeds, equal parts, to the acre. In the case alluded to, heavy rain followed immediately after the sowing, and the seed was not harrowed in at all, but generally it would be well to cover them slightly with a light harrow. A good coat of compost, spread on the sward before the first harrowing would be of much benefit.

The best time to top-dress all meadows that are not of too light or porous a nature, is in the fall. In England nothing was more common, twenty years ago, than to make a compost with barn yard manure and old headlands, and after it was well decomposed, to cart it on to the meadows during the winter months. The effect was very beneficial. Unmixed manure was seldom used. Since the introduction of Peruvian Guano, however, the practice of composting old headlands has, to some extent, given way to top-dressing with light artificial manure. Guano gives a better immediate effect, at a much less cost; but whether it is ultimately more profitable, is an open question. With hay at from \$15 to \$20 per ton, there can be no doubt that a judicious application of good Peruvian Guano, in the fall or very early in the spring, will give sufficient increase, for a few years at least, to pay for the guano, and have a reasonable profit. The constant exportation of hay draws heavily on the soil for potash, and as guano contains very little potash, (not more than two per cent.) it may reasonably be supposed that to manure with guano alone will

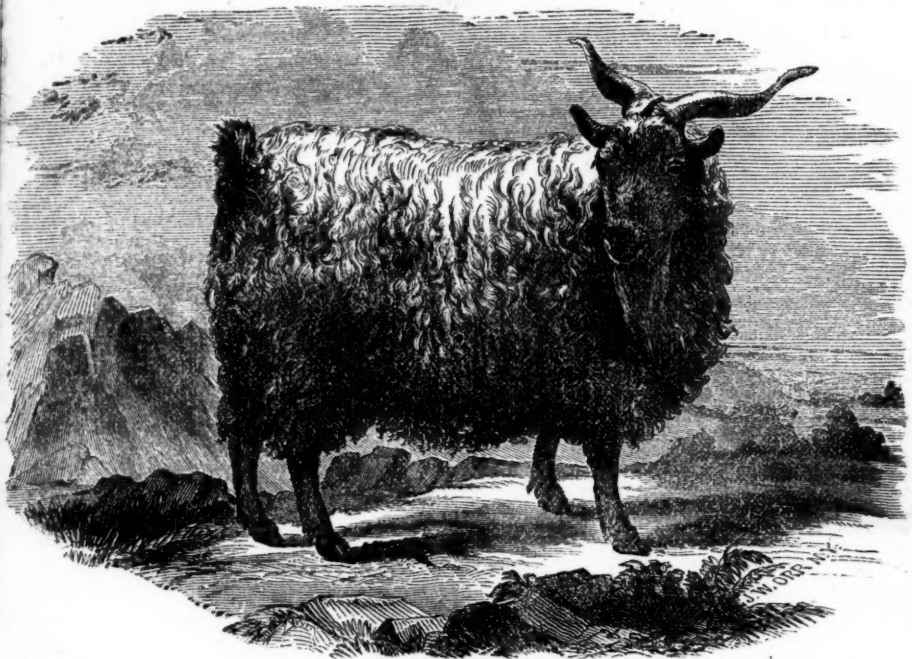
soon leave the soil deficient of available potash. If such should be the case, an application of wood ashes would supply the deficiency.

A FARMER'S WIFE ON CHEESE-MAKING.

To make good cheese, there are several rules to be observed: first, everything used in the business should be kept as sweet and clean as possible. The night's milk should be strained in tin or brass kettles, and hung in a sweet, cool place, as milk will absorb impurities. In the morning it should be warmed and mixed with the morning's milk in your tub or whatever you make your cheese in. When ready for the rennet, the temperature should be from 80° to 84°. Put in sufficient rennet to come in 40 or 50 minutes; cover warm to prevent the cream from rising. When the curd will not adhere to your finger, then cut it with a long knife several times across; let it stand fifteen minutes then take your dipper and turn the curd gently from top to the bottom; let it remain fifteen minutes longer, and break carefully with your hands. Place the strainer over, and let the curd settle; then dip off some to warm to a natural heat. Dip off also some of the cold whey; turn on the warm and stir it with your dipper slowly. Repeat this several times. To prevent the curd settling together, it should be stirred and broken carefully and often; the temperature should be from 190° to 110°. In the course of two hours from the time you commenced warming the whey, when you can squeeze some of the curd in your hand and it seems cooked and dry, it will do to dip into your drainer. It should then be stirred carefully to prevent adhering together, but should not be squeezed or handled roughly. The whey should work off clean, as it is very easy to waste the best part of the cheese by being in a hurry. It should strain very dry and get cool; then add five tea-cups of Liverpool salt to one hundred pounds of curds, stirring well in. I always sift my salt before using it. It is now ready to be put into the hoop. Let it stand half an hour before pressing. Then press lightly at first, adding to the pressure to make it firm and solid. After pressing four or five hours, it should be turned and closed; then press till the next day's cheese is ready for the hoop.

I get my cheese into the hoop about noon, allowing half a day to make a cheese. If the weather is cold, the cheese should be set by a fire to cure, as it will grow bitter standing in a cold room. There is no need of greasing the outside of a cheese which is cased. Here in Vermont we use dairy-stoves for making cheese; they are most convenient and save much labor.

I will make a few remarks on preparing rennets for mild cheese. The rennet should be one year old, as it will fetch more cheese at that age. Dairymen here kill their calves at four days old; drain out the whey from the curd, then add as much salt as there is curd: put it back into the rennet, and put them into little bags made of cotton cloth, each one separate; tie them tight and hang in a dry place to cure. The bag prevents insects working in the rennets and injuring them. When wanted for use, steep three rennets in two pails of cold water ten or twelve days; then strain it off into a jar, and it is ready for use. Add salt enough to have it always in the bottom of your jar, as many people spoil a whole dairy by using rancid rennet.—*Prairie Farmer*.



MALE CASHMERE GOAT.



FEMALE CASHMERE GOAT.

CASHMERE GOATS.

These Goats, are the property of RICHARD PETERS of Atlanta, Georgia, imported during the year 1849, from Turkey in Asia, by J. P. DAVIS, M. D., of South Carolina. Live weight of the male, 155 lbs.; weight of yearly fleece, 7 lbs.—Live weight of the female, 102 lbs.; weight of yearly fleece, 4½ lbs. Mr. Peters gives their history:

These animals were introduced into the United States from the East, in the year 1849, by Doctor J. B. Davis, of South Carolina, from whom I purchased, in the year 1853, the entire flock of pure bred females, with the exception of the one owned by Col. Wade Hampton, of South Carolina; one sold by Dr. Davis to Mr. Davenport, of Virginia, and one to Mr. Osborne, of New-York. The flock now consists of (25) twenty five head, excluding the three pure bred females above enumerated, and several bucks owned by gentlemen in Tennessee, Georgia and South Carolina, who are breeding grades, by crossing on the common goat.

A great many opinions having been expressed not only as to the particular variety to which these animals belong, but also as to their value, and adaptation to the different sections of the Union, they were exhibited at the late Fair of the U. S. Agricultural Society, in order to elicit an opinion from the distinguished stock-breeders and members present.

That they are not the "Thibet Shawl Goat," is proved by their total dissimilarity to a specimen of that breed in possession of the subscriber; the latter variety having only an under-coating of a few ounces—which portion of its fleece is alone valuable.

Works on Natural Science show that they are not the common Angora Goat of the Province of that name, in Asiatic Turkey, as that animal is of varied color, with a fleece of indifferent value.

They have become known as "Cashmere Goats," from the pure white color and fineness of their fleeces, and their undoubted Eastern origin, having been characterized by America's celebrated Naturalist, the Rev. Jno. Bachman, D. D., as "the most valuable variety that can be introduced into our country."

The animals exhibited consisted of

No. 1. A pure bred buck kid, yeaned 20th February last.

No. 2. A pure bred buck kid, yeaned 18th May last.

No. 3. A pure bred buck kid, yeaned 20th May last.

No. 4. A buck kid, yeaned 23d May last, ½ths Cashmere, ½th Common, showing the third cross of the Cashmere on the native goats of the country.

No. 5. A buck kid, yeaned 23d May last, ½ths Cashmere, ½th Common, showing the second cross.

No. 6. A yearling ewe, half breed Cashmere, showing the first cross. The mother of this specimen being a common blue goat.

The fleeces of the matured bucks weigh from six to seven pounds. Ewes yield from three to four pounds. The flesh of the crosses is superior to most mutton, tender and delicious, making them a desirable acquisition to our food producing animals.

The ease with which they are kept, living as they do on weeds, briars, browse, and other coarse herbage, fits them for many portions of our country where sheep could not be sustained to advantage; whilst their ability and disposition to defend

themselves from the attacks of dogs, evidence a value peculiar to this race of animals.

They are free from all diseases to which sheep are liable, hardy and prolific; and experience has proven that they readily adapt themselves to all portions of the United States. RICHARD PETERS. Atlanta, Georgia.

THE SUGAR CANE.

On the 26th June, the Committee on Agriculture in the U. S. Senate were directed to enquire into the expediency of making an appropriation for the importation of seed sugar cane for gratuitous distribution to the sugar planters of the U. S. On 22d July, Hon. Mr. Allen, the chairman of the committee, made a report on the subject from which we make the following extract:

The Committee on Agriculture regard the culture of the sugar cane of great importance to the country, and it is entitled to the protection and assistance of Congress.

From the first introduction of the sugar cane into the West India Islands it has been cultivated by planting a part of the cane of the growth of the preceding year, and occasionally a change of the plant, by importing it from other places, particularly in procuring the cane for planting from those countries near the equator, where the cane is produced in the greatest perfection.

One remarkable fact relating to the culture of the sugar cane is, it has never been produced on the continent of America from seed.

It is only in China that the cane is cultivated by sowing.

Under the direction of the Department of Agriculture in the Patent Office, the seed of the sugar cane has been imported from that distant country into the United States and distributed, for planting.

The French government have also distributed the seed of the China cane in the south of France; the results of the experiments in France and in the United States cannot be known in less than two or three years, as it will require more than one season to form a correct opinion of any advantages to be derived from the planting the seed from China.

The sugar cane, also wheat, potatoes, and many plants now cultivated in the United States, are not indigenous to the country, and to have a good production, it is necessary to change the seeds of various districts, and not to plant from year to year the same seeds or plants on the same soil.

The committee recommend an appropriation of (\$15,000) fifteen thousand dollars be made by Congress for the importation of sugar cane for planting, under the direction of the Department of the Interior, having the charge of the distribution of plants and seeds.

A United States ship has just been dispatched, under the above authority, to procure fresh sugar cane, as well as other seeds.

CORRECTION.—In some remarks on the Chinese Sugar Cane, published in our last, at the bottom of page 157, an error occurred in speaking of some stalks, sent us by Maj. Giddings, in which it is stated that they were grown on *their* land. It should read "*thin*" land. The error was two or three times marked in proof-sheets, but overlooked by the printer.

FINE ENGLISH STOCK COMING.

During the past week, there were shipped from Liverpool, (England,) for New York, on board the Antarctic, Captain Stouffer, a most valuable cargo of horses, cattle, sheep and pigs. Prominent among the cattle were a young cow, called Darlington Sixth, by a son of Grand Duke, bought at Mr. Sainsbury's sale in August, for three hundred guineas; and a very fine heifer, Marie Louise, by Mr. Booth's Hopewell, purchased at a recent sale in Ireland. There were also three first-class heifers from the unrivalled herd of Colonel Towneley, of Towneley Hall, in Lancashire—Buttercup Second, by Horatio, from Rosette; Miss Butterfly, by Master Butterfly, from Rosa; and Pearllette, by Falcon, from Ringlet. The price given for these three heifers was 1,000 guineas, although only just turned one year old. Two of them are descended on the dam's side from the same family as the famous bull Master Butterfly, which animal was sold for Australia, in July, at 1,200 guineas. Miss Butterfly was the first heifer calf by him.

Pearlette is descended from Mr. Booth's Bracelet, one of the most celebrated prize cows of her day; and for the dam of this heifer, Mr. Douglas recently gave Mr. Towneley 500 guineas. These animals have been purchased by Mr. Strafford, of London, for Mr. Thorne, of New York, one of the most enterprising breeders of that country. There were also consigned for this gentleman some very fine Southdown sheep, purchased at the Hengrave sale, as well as some of the best Berkshire and Essex pigs that we ever saw leave the port of Liverpool. The Berkshires were from the famed stocks of Mr. Hewer and Mr. Overman; the Essex pigs were bred by Mr. Crisp, and included the prize boar at Chelmsford, as well as some young sows, also shown there. With the above there were also shipped some splendid Southdown sheep from Mr. Lugar's flock, as well as the shearing ram bought at his sale for 80 guineas. These are for Mr. R. A. Alexander, of Kentucky, a gentleman whose name stands high as a great purchaser of our best animals, and who in a recent visit to this country, bought the celebrated horse Scythian, by Orlando, winner of the Derby, (by Touchstone) one of the best stallions this country ever produced, whose pedigree and performances are well known in the sporting world. He was winner of the following prizes:—

New Market stakes, £350; Dee stakes, Chester, £750; Goodwood stakes, £950; the Newmarket royal stakes, £1,240; the Chester Cup, £2,775; Stockton, £530; Goodwood, £539. This valuable horse, for which Mr. Alexander gave 1,500 guineas, accompanied the above cattle, under the charge of Mr. Beck, and is consigned through the Messrs. Tattersall. Some cattle and sheep were also sent by Mr. Wythes for a house in New York. The entire arrangements for the shipping were made by Mr. Bell, of the Adelphi stables, and were of the most complete character, being as such to reflect the greatest credit upon the care and attention of this gentleman.

[The above stock arrived safely at New York—and with it a lot of selected and rare species of Birds, consigned to Mr. J. J. Bowers, of Baltimore, amongst which are the gold and silver pheasants, remarkable for their beautiful plumage; also, white and black swans, white peacocks, magpies, with various kinds of chickens of the most delicate, rare, and valuable description. Taken all in all, it is

supposed to be one of the most handsome shipments ever made to the United States from Europe.—*Eds. Farmer.*]

Prize Essay on Hen Houses and the Management of Fowls.—For the Premium offered by the Union So. of Va. & N. Carolina.

BY MRS. CATHERINE GREEN, OF DINWIDDIE.

In view of successful fowl raising, first,—due regard should be observed as to the hen house, roosts, nests and hovels. My hen house is 10 by 12 feet, built of pine poles; my roosts are supported by four forks, driven in the ground, and pine poles extended from one to the other. My boxes or nests are made of plank, 12 inches wide, with partitions 12 inches apart, giving each nest one foot each way. They are also supported by forks, say about three feet long, driven into the ground, taking particular care that neither roosts nor nest should have any connection with the house. This prevents the lice, should there be any, from sheltering in the logs or roof, the house answering only for protection to the fowls. In the spring, the house, roosts and nests should receive a coat of white-wash, and at intervals, say about once a month, the roosts and nests should be taken out and scalded, new nests made, and thus cleansed, returned to their places. The floor should be kept well supplied with fresh earth to receive the droppings, and once in 15 or 20 days removed to the compost pile; and a fresh supply of earth put in. My hovels for spring use, cover a space of about 3 feet square, those for summer use about 5 feet. For summer, the ends are left a little open, to admit air. They are also white-washed on the inside, and moved about every 15 or 20 days. In spring, for early use, the hens are set as they take their nests, and carry what chickens they hatch; later in the season, I never put the eggs under less than two hens at a time, and frequently, from 4 to 6. These hatch out at the same time, and I make a selection of the hens, and give a hen from 50 to 75 chickens, and put her under one of the largest hovels. The remainder of the sitting hens are stopped up for a few days, to wean them from their nests, and again turned out for laying. In this way I keep the largest portion of the hens for laying and sitting. We feed the chickens three times a day with corn-meal dough, with a good portion of bran added. They are never turned out early in the morning, nor allowed water, except in long spells of dry hot weather. My average this season, has been about 25 chickens to the hen. I have tried most of the different kinds of chickens, and greatly prefer the Domaneca crossed on the Shanghai. First, they are very thrifty, of quick and large growth, soon attaining the size to fry—their flesh or skin is of a rich yellow, which adds very much to their appearance, when brought to the table. A sample of these is on exhibition, to which the attention of the committee is respectfully invited.

DAMAGE TO EARLY WHEAT.—In some parts of Southern Illinois, all the early sown fall wheat has been greatly damaged by a striped worm, resembling the old-fashioned army worm. The plants came up remarkably fine, but in many localities this worm has eaten up entire plants, roots and all. What it is, and how to destroy it, are important questions just now.

Recent Trials of Reaping Machines in England and France.

A trial of Reaping Machines, under the direction of the officers of the Royal Agricultural Society, took place on the 13th and 14th of August, near Colchester, England. Four machines were entered to cut a field of wheat containing 54 acres. The machines were a McCormick's, by Burgess & Key; a Bell's, by Crosskill; a Hussey's, by Deane & Dray; and a Palmer's.

All the machines were severely tested, on level and rolling ground, and on furrowed land, and worked well the whole time.

The judges awarded £20 to Bell's; £15 to Hussey's; and £15 to McCormick's. In making the awards the judges said; "From the result of these trials we regret to observe that very little improvement has been made in this class of machines since last year." They consider that for general harvest purposes, the machines of Crosskill, (Bell's) and of Burgess & Key, (McCormick's) are to be preferred; but for reaping only, they think Dray's, (Hussey's) decidedly the best machine.

At the recent Agricultural Congress held in Paris, it was announced that several prizes would be awarded to exhibitors of superior Reaping Machines. The trials for these prizes took place on the 3d of July, at Courcelles, in a large field of oats, divided into lots of twenty acres to each machine.

Seven machines were put upon trial, viz: two of McCormick's, (one by M. Bella, of Grignon, and one by M. Laurent, of Paris); Hussey's, by M. W. Dray; Manny's, by M. Roberts; two of M. Mazier, (Orme); and a single horse machine, by M. Simon, of Paris.

Of all these, three only accomplished their tasks—those of M. M. Dray, Bella and Laurent. The others either stopped of themselves or were stopped in consequence of their defects.

The chief interest of the trial became concentrated upon McCormick's machines by the French makers, and Hussey's by M. Dray; and it was to these that the prizes were awarded. The first prize was not adjudged to any one, none of the machines exemplifying that degree of excellence for which alone, if attained, it was designed. Two second prizes, of 400 francs and a silver medal each, were awarded to M. M. Bella and Laurent, and a third, of 300 francs and a bronze medal, to M. Dray. The reason that the fourth prize, and not the third or second, was given to M. Dray was, that a greater number of laborers were employed in connection with his machine than with either of the others.

KENTUCKY BLUE GRASS—ITS CULTURE, &c.

This grass, which constitutes the glory of Kentucky pastures, is regarded as superior to all others for grazing, and what adds more to its great value, it grows with luxuriance on lands necessarily retained for timber, which, without the grass, would yield no annual return beyond the value of the timber removed from them.

The system of converting this woodland into productive pastures, was introduced into Kentucky, in the counties of Benton, Clark and Fayette, fifty years ago, by emigrants from the south branch of Potomac. This system extended gradually until it embraced a considerable portion of the State, and it is now beginning to constitute an important feature of farming in other States. It is equally applicable to the rich calcareous soil of the West.

Preparing the Land and Sowing the Seed. Where timber is an object, the important point to be considered is to admit into the enclosure the greatest amount of sun, consistent with the preservation of the valuable portion of the timber. Various methods have been adopted in Kentucky, according to the circumstances, in preparing these woodland pastures; some cut out the undergrowth and firewood, and then sow the seed; others belt the timber one season, and clear out the undergrowth, and then sow, the ensuing winter; the latter method is the most expeditious, and requires the least labor. After the undergrowth is removed, the leaves should be gathered up, so that the seeds may come in contact with the moist soil; some gather and burn it, but we prefer to gather it into heaps, and let it lay upon the land. This may be done, and at the same time leave the ground in the best possible condition to receive the seed, by the use of the scraper. This is made in the following manner: take a piece of plank five or six feet long, and about two feet wide, insert therein, at right angles, a common ox-tongue, and attach one yoke of oxen and one horse to it. The seed may be sown at any time from November to April; but the best time for sowing, is in January or February.

Quantity of Seed.—From ten to fourteen pounds of seed should be put on an acre. Some farmers add to this three or four pounds of timothy seed.

Blue grass is an excellent renovator for open worn lands; when sown upon cleared land, a mixture of timothy and clover seed, in the proportion of three or four pounds each, to ten or twelve pounds of clean blue grass seed, is preferred. The advantage resulting from this is, it secures at once, a well covered pasture, that will bear a considerable grazing the first year; the blue grass will soon expel the clover and timothy, and take full possession of the ground. Open grounds are usually sown in March, upon wheat, rye, or oats.—*Valley Farmer.*

Miss Anna Skinner, a lady of near four score years, only surviving sister of the late John S. Skinner, so well known to the Agricultural World, volunteered lately to Mr. Bowie, the agent of the Commissioners, a cash subscription to the stock of the Maryland Agricultural College.

As a mere benefaction to a noble work, this subscription, from such a source, would commend itself to the friends of agriculture; but this venerable lady's near relationship to one whose vigorous and ready pen was so influential in opening the way of all agricultural progress in this country, gives to it a peculiar fitness and propriety. It is a voice of encouragement, and an expression of good will from one than whom no one living could better represent to us the sentiments of her lamented brother. Moreover, it is a woman's tribute, such as no one better than he could appreciate; doing honor to his memory, by honoring the great work to which he devoted his life.

"A Constant Reader" asks us to give a good article on milking, "how to keep cows to their milk, and how to get it all out of them." We would be obliged to some of our dairy farmers to help us to gratify our correspondent—may we ask the assistance of Mr. Calvert, who has had much experience in the dairy business?

AMERICAN FARMER.

Baltimore, December 1, 1856.

IMPORTANT NOTICE.

With our January No. we will send to all who may be indebted for subscription to the *American Farmer*, a statement of their account, which we beg they will examine and remit the amount due with as little delay as possible. There are a large number of our subscribers who pay so punctually and certainly, that we are sorry to dun them by this little reminder in shape of a bill. But we must send to them, because it would be very inconvenient to separate them from the large number who do not pay so punctually. It sometimes happens too, that in so large a number of bills, mistakes will occur, and bills may be sent to those who owe us nothing, or who have paid to agents who may not as yet have made their returns—for all such cases, we make our apology in advance.

We head this as an important notice. It is important—very important. It is important to our subscribers, that they do us the small justice of paying, and paying promptly the little sums they can so easily pay. Very important to us, because the very large sums we have to pay are made up of these little ones. Our friends will bear in mind that while it is a very easy thing to pay one dollar, it is a very hard thing to pay a hundred, unless we get the ones which compose the hundred. We are well aware that a large portion of neglect in this matter is owing to its apparent insignificance. Will our friends all be good enough to disabuse themselves of a most mistaken idea.

We received from Col. Ramsay McHenry, President elect of the Maryland State Agricultural Society, too late for insertion in our November number, the following, being, as he states, "substantially the remarks called forth, on his introduction by the committee appointed to inform him of his election, by the address of welcome courteously extended to him by the retiring President."

REMARKS OF THE PRESIDENT ELECT.

Mr. President, and Gentlemen of the Maryland Agricultural Society:—

In very kind and complimentary terms, your committee, detailed for the purpose, announced to me, at a late hour last night, the high honour conferred on me by your unanimous vote, and you, sir, have been pleased, in welcoming me as your successor, to use language of panegyric, whose source may justly be traced to your friendly partiality, rather than to my intrinsic merits or qualifications. When I see around me so many gentlemen who, as soldiers in the cause of agricultural improvement, are by far abler, as well as older than myself; when recollection calls into view the long array of eminent Marylanders who have rendered distinguished services to the classes concerned in the fundamental branch of industry; I am unable to convey to

you, by any words at my command, either the sentiment of gratitude with which you have inspired me, or my earnest solicitude lest I should prove utterly inadequate to the efficient discharge of the manifold duties devolved on me by your preference.

Believe, however that, fully alive to the dignity and importance of our calling, and convinced that the associations like ours are susceptible of being instrumental in elevating that calling and advancing the respectability and welfare of its members, I will assiduously devote my energies to the ascertainment and promotion of the best interest of this Society, and the large body in our community of which it is the natural guardian and accredited representative. But, farmers and planters of Maryland, without your cordial and zealous co-operation I am powerless for good. It rests with you to determine the fate of the incoming administration.—Sustained by your sage counsels, harmonious support and active aid, this Society will progress rapidly in prosperity, public favor and usefulness. And I venture to indulge the hope that you will enable me hereafter to look back, with grateful remembrance indeed, but without mortification in the comparison, to the periods of our corporate existence, when my two distinguished predecessors, to whose zeal, energy and varied accomplishments we are so deeply indebted, presided over our association. To this end I invoke from one and all, whether heretofore within or without the pale of our organization, an earnest concurrence in devising and attaining ways and means conducive to the development of the agriculture of our State, and to the elevation, moral and intellectual as well as physical, of all classes intimately connected with our primary and heaven-ordained pursuit. And, in connexion with this invocation to harmonious co-operation, permit me thus publicly to ask, that whatever offences I may have committed, in the exercise of an active membership dating from the foundation of this Society, against the aggregate body or individuals, be now buried in oblivion, or at least forgiveness; as I do assure those present that I will cherish the kindest feelings, unmingled with past griefs or distorting prejudices, towards every member of our association as such; and nothing which has transpired in the past shall be permitted to bias, in the slightest degree, my official action. On the contrary, I promise, in the exercise of the supervisory functions and executive power confided to me, while confining myself strictly within the limits of our constitution, to look with a single eye to the advancement of your prosperity; and so to conduct those affairs entrusted to my discretion, that neither friend nor foe, (if I should be so unfortunate as to have near me one of the latter,) shall fairly ascribe to me partiality, selfishness or wilful negligence.

Let us then in unison strive to enlarge the scope, add to the numerical force, and increase the usefulness of our association.

But what is most requisite, as the indispensable starting point for our career of improvement, is to arouse thoroughly the agricultural classes to a due sense of their deficiencies and needs, together with a clear perception how these may be appropriately remedied and supplied.

And I will be pardoned, I trust, for so far diverging from the course of general observations, to which the nature of the occasion would seem to restrict me, as to direct your attention to a discouraging instance of the lamentable apathy pervading our community, in reference to the vital subject of

systematic agricultural education. While merchants, mechanics, the members of what are termed the liberal professions, and even the experts by land or sea in the life-destroying art, are, in youth, trained specifically with a view to their future pursuits, in especial schools, ours, the chief and most widespread of all occupations, is left, in Maryland, utterly unprovided with any efficient agency, adapted to discipline and prepare the purling hosts who annually enter upon a desperate struggle to wrest from mother earth the subsistence and superfluities which she so freely yields to instructed skill. In vain have a few individuals devoted much time and trouble to the organization of an institution capable of supplying adequately the desirable nurture, both practical and scientific, to the embryo husbandman. In vain has the Legislature of our State, by the persevering efforts of a few zealous friends of the cause, been induced to extend its fostering care to agricultural education, and offer a handsome bonus (drawn in great part from other classes in the Commonwealth) to stimulate the liberality and enterprise of agriculturists. It well nigh exceeds belief, that we who, each one of us, unless supernaturally endowed, must have sensibly experienced the defects, either practical or intellectual, or both, of our early education, in relation to the principal business of our lives, should listlessly suffer this excellent opportunity to lapse, through our inertness and lack of *esprit du corps*. And this, too, in spite of the example of our sister States in this confederacy, and in the face of the rapid advances towards well organized systems of agricultural education, now taking place in various countries of monarchical Europe. It cannot be that the farmers of Maryland will long remain unconcerned for the elevation and prosperity of their class, or regardless of the welfare and success of their posterity and heirs!

If I dwell longer on this topic than may appear to befit the circumstances, it is because, as a sincere and ardent friend of the agricultural interest, I could not have failed to avail myself of this opportunity, without a dereliction of duty and a want of fealty to you, my most respected constituents. Permit me then to urge every Maryland farmer present, before leaving this city for his home, to affix his name, contributing according to his ability and discretion, to the subscription lists for the endowment of this noble undertaking. It cannot fall through without a blot upon our reputation for enlightened liberality, and I rejoice in the confidence that those with whom I am associated will not suffer our fair fame to be impaired.

There are other interesting topics to which I would like to advert, were it seasonable and fit, but this is not the time for entering into details. And besides, in the position, so much above my desert, which you have assigned to me, manifestly I can serve you better by action than by words. It is by action then that I will chiefly endeavor to requite your confidence. And for the errors of judgement and various short-comings which I will doubtless be guilty of, I crave before-hand your lenity and charitable construction. The mantle of office, which your suffrages have decreed that I shall receive next December from my respected friend, now filling it with such dignity, grace and acceptance, and to the transmission of which he has just now alluded in language eulogistic of my unworthy self, will not, I fear, rest upon my shoulders as a garment meet for the wearer, but bestowed by you, cannot fail to serve as a cloak to my weakness and a shield

against that severity of criticism usually visited upon one occupying a place to which he is entitled by neither talent nor experience.

Wishing to avoid prolixity, I bring to a close these brief remarks, by repeating my heartfelt acknowledgements for the high honor I have experienced at your hands, and my firm determination to meet your esteem, by the faithfulness of my service, if I cannot (as I feel that I will not be able to) win your admiration by the brilliancy and success of my administration.

Agriculture in the New England States, Maryland and Virginia.

The November No. of the *Southern Planter* makes large extracts from two letters written by Mr. Brown, of the *New England Farmer*, upon the tendency of large portions of the land of some of the Eastern States to go back first to grass, and then to forest lands, and their abandonment and desertion.

"Nature has assumed the sway," says the writer, "and again clothed the earth with her primitive dress. The forest is every where covering hill, valley and plain. Silence is in its dark courts, save when the thunder breaks over it, or the tornado prostrates it with its ferocious breath." "Large portions of Massachusetts soil, and immensely larger of Maine, New Hampshire and Vermont, will grow up to forest in spite of furnaces and locomotives." "A fellow traveller detained here from Hillsboro", states that twenty farms in that town have been deserted, and probably will never again be occupied by man; while a resident of this place informs me, that on a single mountain tract in this neighborhood the farms are deserted, and the buildings are in ruins! Such are the striking features all over this region of country."

The *Planter* commenting on these extracts, says of Virginia in contrast:—"Here, we are annually opening up and improving thousands of acres and restoring fields—not farms—that have been exhausted and abandoned. All we want is an additional supply of negro labor to make the whole of lower Virginia blossom as the rose." The *Planter* also notes the great rise in the value of farming lands in portions of Virginia.


We wish to put on record for Maryland a like statement. In every portion of the State, with which we happen to be familiar, farming lands have advanced in the last fifteen years, one and two, and from that to three and four hundred per cent. Such as were worth forty to fifty dollars, would bring now eighty to one hundred dollars per acre. The latest sale of which we have heard is the farm of Dr. Rogers, on West River, in Anne Arundel Co., for something more than a hundred dollars per acre. This farm is five or six miles, we think, from navigable water or other conveyance to market, and has no advantages, that we know of, over many thousands of acres in the same region. We met recently a party of gentlemen from this county, on their way to Virginia, in search of cheaper lands for investment. The price in their own section being not only very high, but none for sale at any price.

The price of a lower grade of lands has increased in much larger ratio. Such as were worth eight to ten dollars will now bring, in some sections, twenty, thirty, forty, and even fifty dollars; and the increased product under good management justifies these advances in price.

And such improvements, let it be remarked, as have come under our more immediate notice, have taken place in what are peculiarly the slave-holding sections of Maryland. In the western counties of the State there are a large number of German farmers, among whom slave labor is little used. They hold usually farms of moderate extent, and cultivate them with much economy, good judgment and skill. The Quaker settlements of the State, are remarkably well farmed, and generally in an excellent state of improvement. But the great advance of late years, both in improvement and price, of which we speak now, because they have come more especially under our notice, is in the lower slave holding counties of the Western Shore and portions of the Eastern Shore. We have in our mind various sections, which for quality of soil, excellence of cultivation, and all the advantages, comforts and enjoyments we look for in a highly civilized and Christianised community, we believe are nowhere surpassed.

These facts, taken in contrast with those we have extracted, may teach a lesson to some who are impressed by hypocritical groanings over "the desolations of slavery," or the ignorant pratings about "the curse of slave labor." Hundreds of farms in free New England are abandoned, given up to "the encroachments of Nature." We know not one in Maryland. There "the forest is covering hill, valley and plain," while in Maryland many farmers burn coal for fuel, which has been transported hundreds of miles, because they can't afford to keep their land in wood. Those beautiful New England houses, which these poets tell of, as many as twenty in a neighborhood deserted and abandoned to ruin,—"to the owls and to the bats." In Maryland the waste places are built up. We have in our mind a neighborhood, where hardly less than twenty new dwelling houses have been built in some five years past, at an average cost of not under four thousand dollars.

Yet political preachers tell us that we are "curst with a curse;" and agricultural orators assure us that "the sovereignest thing on earth" for agriculture, is "free labor." "Give me," exclaimed one of these valiant improvers, "a plenty of lime, guano, plaster, grass seed and free labor, and I will regenerate Virginia." A very wise Solomon, surely! We know men with something less than the wisdom of Solomon, who, with these several little appliances and means, might do as much and dispense with the "free labor."

 An interesting communication from Dr. D. Stewart, is reluctantly deferred to our next No.

BAD PRACTICE—A STANDING PASTURE.

No farmer we suppose, who is a farmer, really and soberly thinks that his land is benefitted or that it is not very seriously damaged, by being trampled and trod in wet weather, and worked up into mire, by the feet of cattle, and horses, and hogs, and sheep, and should he have paid ten dollars per bushel for clover seed, as he did last spring, one half of which perished before it saw the light, it may well be supposed that he would not deliberately and of malice *prepense* expose the young crop to the destruction such treatment would bring upon it. Yet strange to say, men who pass for judicious farmers, allow, in this respect, for want of prudent foresight, what their better judgment would at once condemn.

Passing lately through the farm of such a farmer, after a soaking rain of some fourteen hours, we saw twelve horses, twenty cows, oxen and young cattle, and hogs, and sheep not to be conveniently numbered, hoof deep in the mire of a young clover field. We have an abiding affection for young clover plants; a tenderness like our love for young babies and little pigs, (the babies will please pardon the association,) and to see them trampled and trod in so savage a manner, is such a grief to us, that we determined to lay the matter formally before the grand inquest of land improvers.

The tragedy happened on this wise. The four field fallow system, a good system for some lands, but not generally, and *never without extra pasture land*, was the system of this farmer. Having fallowed his clover field for wheat, his large stock, by the 1st September was thrown for a bite of grass upon his young clover. Now, a well set field of young clover may properly enough be grazed moderately during the fall months, but to have it exposed to the tread and to the bite of numerous flocks and herds continually and in all states of the weather and all conditions of the ground, is simply murderous. It is murderous to the clover, and doubly damaging to the land. The latter losing the improvement which the clover destroyed was designed to effect, and getting the direct injury of the treading, from which it has no well formed turf to protect it. But under this arrangement of the farm, the stubble fields are to be the pasture ground through Autumn, Winter, and Spring. Now, however a farmer may expose his clover field in the Fall, there is no one so grossly careless as to allow his stock to go upon it during the Winter and Spring months. It should be most sedulously preserved from encroachment, until it gets into bloom, and has attained such growth that much more will be trodden down than the stock can consume. This will not often be before the 25th of May, in this latitude. But with this degree of care for the young clover field, the whole stock is thrown upon what was the fallow

field of the year previous, and is to be the corn field of the coming year. Here with very little grass of any sort, and no turf, the trampling is concentrated through the freezing and thawing of Winter and Spring, until the preparation for corn planting drives them prematurely into the clover field, or perchance into some *outlet* as it is called. This is too frequently a poor apology for a standing pasture, and very generally contains some marshy ground, where the early springing grass proves a sore temptation to cows and oxen craving a fresh bite. They are too surely lured by the treacherous bait, and wo to the old cow that puts her foot into the soft places that always give the earliest bite.

Now, what we mean to recommend as a remedy for the several evils mentioned, and others that we might enumerate, is a thoroughly set, well turfed standing pasture. This may be small or large, according to circumstances. On a grass farm, or where the rotation consists of a number of fields, two or more of which are in grass, it is of less importance than on a grain farm. Where the farm affords an out pasture, the standing pasture need not be a large one. But always, under all circumstances, an enclosure greater or less near to the stables, and well set in grass, is indispensable.

HOG PENS.—In our October No. we noticed the reception of an excellent communication from "E." descriptive of his hog pen, and plan of making manure, and premised to publish it in our next, but by some unfortunate casualty, the MSS. was mislaid, and has not since been recovered. Will "E." do us the favor to furnish us with another copy, and if in his power, a drawing of his pens, for our next No.

An offer was made in our pages for a Prize Essay on this subject; but one essay was presented, which was placed in the hands of a committee, the chairman of which was taken sick whilst at the exhibition, but has since reported that there is nothing in the essay to entitle it to the premium.

B. P. JOHNSON, Esq., Corresponding Secretary of the New York State Agricultural Society, was present at our late State Show, and in noticing the same, alludes to a visit he made whilst in this vicinity, to the farm of George W. Dobbin, Esq., of Howard County, and remarks, that "a few years since, when Mr. Dobbin first located here, he purchased land at about \$9 per acre. The last purchase, which he lately made to complete his farm, cost him upwards of \$90 per acre, much of the increase having arisen from the improvements Mr. D. had made upon the lands occupied by him." This is an additional evidence to what we have given elsewhere, of the increase in the value of landed estate in Maryland.

From the Southern Planter.

THE AMERICAN FARMER.

We take occasion to say in reply to the American Farmer for October, that the failure to give credit for its excellent article on **FREE ACID IN SOILS** was accidental, and the fault of the printer. Whether there be or be not free acid in soils, is, we think a distinct question from the theory that free acid in soils produces or promotes the growth of sorrel. To that theory we have been a convert; for we have seen on some of the best lands in Jefferson, that had failed to shew any improvement from lime, a luxuriant growth of this very plant; and the land on our late Shadwell farm, from which, when it was in tillage, we preferred to save our seed wheat, from the superior sample it always gave, was a river hill which never failed to produce a growth of sorrel when the clover did not take.

In two other matters we are sorry that we cannot agree with the editors of the American Farmer, to wit: the Agricultural Department at Washington, and their views on "An improved system for a Cotton Plantation."

The first of these it is unnecessary to notice now, as Mr. Fremont may be elected, and discussion unnecessary at any time.

As to the second, it may be very true, and in many places at the South, it no doubt, is true, that one luxuriant crop of peas may restore the waste of the three preceding tillages. Potatoes—sweet are meant—are not an exhausting crop, but rather an improver, as far as our information extends; and oats so far from impoverishing land, in the majority of cases where we have heard of their being fairly tested, are likewise rather an improving crop, and will bear successive cultivation on the same land for several years without diminution of product. This may contradict theory, but it is a fact.

The fact that land has "five regular ploughings in three years," is not necessarily adverse to good farming, or a proof of defective rotation. The Editor's remarks occur on page 123. On page 124, they extract from The Southern Farmer the very interesting account of Mr. E. R. Turnbull, of Brunswick's, farming with pea fallow, in which it appears that he has ploughed his land eight times in four years, or sixteen per cent. oftener than the case treated, with manifest advantage. We ourselves published, last summer twelvemonth, an account of the results obtained by Mr. Mathews, of Chickahominy, near Richmond, who had ploughed his land twelve times in six years, i. e. twice annually, and by a pea fallow on the stubble, in six years' successive cropping, without manure, rest, clover, lime, or any other appliance whatever, had run up by steady annual increase from seven bushels per acre to twenty-five, being an average annual increase of sixty per cent.

Mr. Mathews gave \$25 per acre for his land, and has recently sold it for \$50; so he had not hurt it much. The subject of this experiment, about the poorest land he had, besides paying a handsome dividend immediately, gave back double its price in the sixth year. We have lately passed through his corn field, a portion of similar land, which had been "laid by" with peas for the last three years of successive cultivation, and though it has not escaped the common disasters of drought and chinch bug, the growth of stalks showed that it had "cut out" for an eight barrel crop.

We have heard a case of a farmer in a tide water country, who cultivated the same land in corn every year of his long life, making an annual average of six barrels per acre, whose only peculiarity was sowing peas at the last working. We know a gentleman who, on stiff land cultivated a lot in corn for eight years with peas sowed at the last working, in the baulk, and turned in when in full bearing, and made fine crops all the time.

Instances to the same effect may be seen in Mr. Edmund Ruffin's account of the pea culture of North Carolina, in his essay on peas.

This may be bad "rotation," but it is good farming, if profit be the test. It is a rotation we do not pretend to recommend, because it will not suit all lands, because economical considerations, very distinct from principles of rotation, may and will interfere to modify this or any other system. We state these facts as cases in point, to prove that we should not conclude that "an improved system for a cotton plantation" is necessarily bad because it makes one crop of peas pay for three years' exhaustion, and requires "five regular ploughings in three years."

In our October No. we had a paragraph which called forth the above article from the *Southern Planter*. The absence of "credit" alluded to, we were sure was accidental, and only noticed it, because we wished to claim the article distinctively. We are somewhat tenacious on this particular topic, not only because we encountered in upholding our views of it, the direct opposition of one of the most generally esteemed and reliable agricultural writers of the day, but the very general dissent of intelligent men, whose attention had not been especially drawn to the facts. One Maryland correspondent of the *Planter*, had the good taste to ridicule the lack of argument with which our opinions were sustained. We knew that we were in the right, and if our judgment failed us, as to what amount of argument is sufficient for some men's minds, we believe we said quite enough to put intelligent men, who are willing to be convinced, in the way of satisfying themselves. Of this we have had ample proof heretofore. It will be seen now that the Editor of the *Planter* acknowledges, with characteristic candour, that his opinions have undergone a change upon the subject. He cites facts which have come under his observation, quite as conclusive as those we have adduced, that the growth of sorrel is entirely consistent with an ample supply of lime, and by no means indicates a deficiency of that material element.

In two other matters the *Planter* regrets that it cannot agree with us. The Agricultural Department at Washington, and our views on "An improved system for a Cotton Plantation."

As to the former, we were aware that he did not agree with us. Some months back, in presenting several articles from an esteemed correspondent, we were at some pains to offer our own opinions, but the argument made so little impression on the *Planter*, that he pronounced the subject un-

worthy of his serious consideration; but intimated that he might hereafter, for the benefit of some folks show up the folly of the thing. We have waited in expectation of this, but it seems our friend has waited in expectation of Fremont's election, in which event, we fear from his remarks, he designed to "slide." But Fremont is not elected. New Jersey and Pennsylvania have taken such a grip upon us, that we could not "slide" if we would, and Indiana and Illinois hold out their arms so lovingly that we would not if we could. This being settled, it is incumbent on our cotemporary to 'show cause if any there be' why Uncle Sam (may he live forever!) should not give his attention to the "general welfare." We think he should. We think that is his business. And when he minds that business as he should, the great interest of agriculture, will come in of necessity, for a lion's share of his consideration.

As to the other point on which the *Planter* dissents from our opinions, viz: as to a system of cultivation remarked upon in our October No. we are not so wedded to any opinions we may have advanced, as not to be entirely willing to review and correct them when there may seem to be occasion for it. We think sometimes that the true principles of tillage are so far from being thoroughly known and firmly settled, that the light we have does little more than make the darkness visible. Yet in carefully noting the facts adduced by the *Planter*, we do not see that, so far as anything at all is known upon the subject, we are not still in the right. The matter is of sufficient interest, however, to justify our recurring to it under another caption.

NEW BOOKS.

We have received from C. M. Saxton & Co., N. Y., a little work entitled *Morgan Horses*, being a Premium Essay by D. C. Linsley of Middleburg, Vt., on the origin, history and characteristics of this remarkable American breed of horses; tracing their pedigree from the original Justin Morgan, through the most noted of his progeny down to the present time. It is illustrated with numerous portraits of some of the most remarkable Morgan horses, and contains hints for breeding, breaking and general use and management of horses.

No one having a present or prospective interest in horses of any sort, should fail to have this work, for what it says of all the various breeds, themselves, adaptations and general management. It is, however, especially interesting and valuable to one who wants information as to this highly valuable native breed—the Morgan. The book has much useful matter which is presented in entertaining and agreeable style, extracts from which will be given hereafter. On another page we give portraits of the most noted horses.

THEORY OF ROTATION AND GREEN MANURING.

In the article from the *Southern Planter* on another page, some facts are stated, bearing upon the important subject of a proper rotation of crops, which are worthy of separate notice and comment. In a former No., we had objected to a system of cultivation, in which cotton, corn, and small grain or potatoes, follow each other successively, in a constantly recurring rotation, with no relief but a crop of peas to follow the small grain after harvest of the third year. When potatoes occupied the ground, there could be even no peas. The Planter dissents from our conclusion against such practice, and states several interesting and remarkable facts, which show an improvement, or at least no deterioration under like treatment. "One luxuriant crop of peas," he says, "will restore the waste of three preceding tillages. Sweet potatoes and oats are not exhausting, but rather improving crops—that such facts, though they may contradict theory, are nevertheless facts."

A fact cannot contradict a true theory, though it may appear inconsistent with it. A single well established fact, which is distinctly at variance with a received theory, proves the theory false. And it is well worth while to enquire, in a subject of so much interest, whether the inconsistency is substantial or only apparent.

The theory of "rotation" or a change of crops from one to another of different habits, was founded originally upon the observation, that different crops exhausted the soil in different degrees. And crops were accordingly classed as exhausting, non-exhausting, and even ameliorating. The grain crops were thought to be most injurious to land, root crops less injurious, and clover and green crops ameliorating. When the soil seemed to be tired of grain, it was found that it would still grow roots, and when roots failed, clover would still flourish. After such a change of crops, it was found that wheat and other grains would grow again. This suggested a great improvement upon the old system, which left lands to lie out, and resorted to frequent ploughing to bring them in condition for wheat. The practice of changing crops in what is called "rotation" was established, and success in all well farmed districts of this and other countries, we believe, is thought to depend very much on a judicious arrangement of crops in accordance with the above suggestion. Science, while its researches may have tended to modify the practice in some measure, sanctions it in the main, and has shed a clearer light upon it. It accepts the observations of experience, and enlightens and improves our practice, by showing how and why these things are so. It takes the constituent parts of plants and divides them into two

important classes.—the *organic* elements, or all that part of a plant which passes away in burning. These are Carbon, Oxygen, Nitrogen, and Hydrogen, and are not necessary constituents of the soil, but come directly or indirectly from the atmosphere.—That is, are absorbed by the leaves from the air, the dews, &c., or are furnished to the roots by rain water or by the slow decay of organic vegetable matter in the soil. The inorganic elements constitute that portion of the plant, which does not pass away in burning, but remains in ashes. They are Lime, Magnesia, Soda, Potash, Iron, Manganese, Silica, Chlorine, Sulphuric acid, Phosphoric acid: these are called *mineral* elements. They are a part of the constitution of the soil. Plants obtain them only from the soil, or by direct application in manures. These are nearly all essential to all plants, but in very different proportions. Some require a large per-centage of Potash, but other elements in smaller quantities; some more Silica, or Phosphoric or Sulphuric acid, or Lime, and much less of other elements. Wheat will consume a larger proportion of some of them, grasses of others, roots of some, clover of others; but all require more or less with trifling exceptions of all of them. If they are all essential to all crops, but unequally consumed by several valuable crops, a due economy of these elements would suggest such an arrangement of the several crops, as would consume them in a series of years as nearly as possible in equal degree. It would readily occur as bad management to use up by the growth of wheat, all the available Phosphoric acid, and leave a large per-centage of Potash, or Lime, or Sulphuric acid, sufficient to grow abundant crops of potatoes or clover or other valuable crops, but useless for want of Phosphoric acid, which though required in much smaller quantity than for wheat, is still essential. So it would be improvident by growing continually any one class of plants to exhaust the soil of one or more elements. A judicious change from one class to another, would manifestly preserve the productiveness of the soil, through a course of cropping which would be longer or shorter in proportion to the skill and intelligence with which the principle is applied.

Now if it be true that these elements exist in the soil in limited quantities, and that all plants consume them in greater or less degree, every crop taken from the soil tends to diminish the store, and if we admit that this or the other is an improving crop, it is not that it does not take away a portion of these soil ingredients, but that what it takes away is more than compensated by some other circumstance; of thorough cultivation of the soil perhaps, or putting it in some improved condition for yielding up its stores to the succeeding crop. Every cultivated crop, whether potatoes, or oats, or clover,

or peas, if taken from the land and not returned to it undoubtedly abstracts a portion of the mineral elements and leaves the land to that extent less capable of production. But if it leaves still enough of them behind, and the land by their cultivation, better prepared for the coming crop, there is a quasi improvement; because better crops are the result. As if we should say a soil known to be very rich in all the elements of plants, but badly ploughed and cultivated, is improved by more thorough and perfect cultivation. But just in proportion as this sort of improvement is effectual, so certainly does it tend to ultimate exhaustion of the soil. It is taking away the more rapidly and constantly that of which it restores nothing. Nor is it consistent or compatible with acknowledged principles to say that a crop of peas, "may restore the waste of three preceding tillages." It may bring back a large amount of organic matter; possibly as much as the preceding crops have consumed, (though this is not probable,) but of the inorganic—of potash or lime, or phosphoric or sulphuric acid, or any other mineral matter, it restores not one atom or iota to the soil, but what itself has taken from it. Return the whole Pea crop, and there is no addition whatever made to the mineral elements of the soil. So that whatever of mineral matter is abstracted by the cotton and corn and wheat or oats or potatoes, ("the preceding tillages") is gone absolutely, gone forever. There is no restoration, and no compensation from the Pea crop, of these material ingredients of every cultivated plant.

How then are the facts as stated by the Planter, consistent with the established theory, and in what consists the great value of the Pea crop, as an improver, a value which, as is known, we estimate very highly? We must presume, as the Planter seems to admit, that those were exceptional cases, where a continued succession of good crops was kept up for a series of years. The soil was very abundantly possessed of mineral elements, and perhaps of organic matter, and such cases could not be taken as guides to ordinary practice. As long as the mineral elements are abundant, the effect of active, frequent cultivation is to bring them more effectually into use, to make them more available as the food of plants. The same cultivation, under ordinary circumstances, would probably be followed by rapid exhaustion.

The mineral constituents of plants may be ample for a full crop, but not in a condition to be assimilated. Unless in a soluble state, capable of being taken up by water, they are not available as plant food. It is one province of good husbandry to make the earth yield up those stores which in wise economy she withholds sometimes very closely. Mere tillage, the thorough cultivation of the land, by ad-

mitting the atmosphere and rain water, with their carbonic acid and ammonia, is an efficient agent for this purpose. One effect of lime is to break up chemical combinations, and set free their elements. The great effect of Peruvian Guano, is ascribed by Liebig mainly to the powerful solvent action of its ammonia upon the mineral constituents of the soil. The action of a crop of peas, as regards the mineral constituents, is the same. It gathers in its growth carbonic acid and ammonia, which act as solvents. It brings them up likewise from a lower stratum of soil, and places them in convenient proximity to the roots of such plants as have a more shallow range; and it may be that its more vigorous vital power enables it to take up what other plants cannot assimilate, and prepare it, as the full grown animal prepares the nutriment, which, but for its interposition, its young could make no use of. The pea crop, therefore, has an important influence upon the mineral plant food, by changing its condition and arrangement in the soil, but, as we said before, adds nothing to it. Of organic food it adds largely to the soil, because of this it has received almost entirely from the atmosphere. These facts it is important to bear in mind, in a proper estimate of the pea crop as an improver.

Practically, as regards this crop, we believe its value, and that of clover, used in the same way, results from the inefficient methods which have been heretofore used in the cultivation of what are called worn-out lands. We venture to suggest that a very large portion of such lands are not worn out, but are rich in elements which unskilful workmen have packed away with the plough beneath the few inches of surface soil. These few inches, it is true, have been thoroughly riddled and washed, and discourage us by their appearance. Such lands, if this view be correct, want vegetable matter which, while it furnishes organic food, furnishes solvents for these minerals. They want deeper breaking up. Lime is useful to them very often for the same purpose; and guano acts with greater effect upon them. But we do not doubt that, *for the present*, the great agent, the best, the cheapest, the most reliable for all such lands, is the field pea or the clover.

We say *for the present*, because we would have it borne in mind, that the more efficient these agents are, the more certainly they tend to ultimate exhaustion, unless the increased use of the mineral elements are compensated by artificial application.

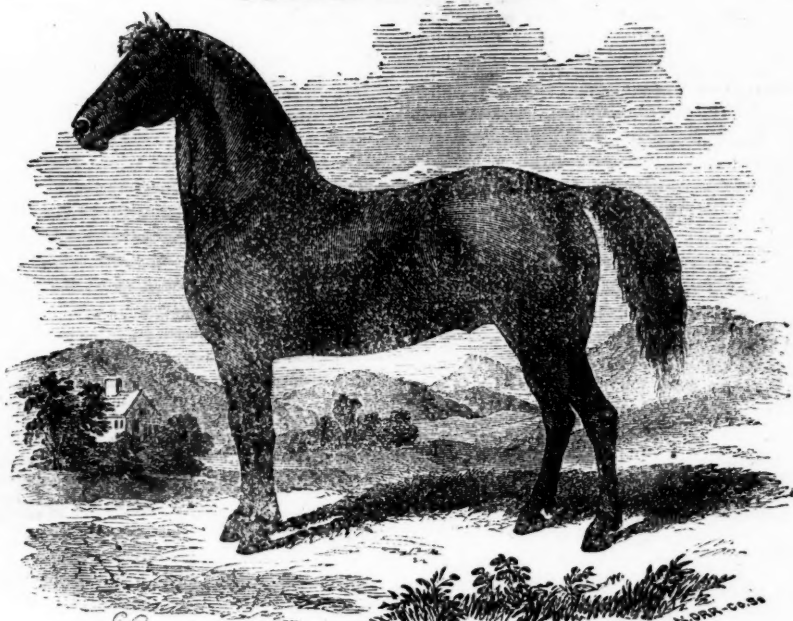
THOROUGH-BRED.—The term *thorough-bred* implies "a class of our domestic animals, whether it be of horses, cattle, sheep or pigs, which is derived through a long race of ancestors, each of which has been selected with the utmost care for those superior qualifications which render them most useful and valuable."

1856.]

THE AMERICAN FARMER.

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JUSTIN MORGAN.



GIFFORD MORGAN, JR.



N. ORR & Co. N.Y.

From prints in Linsley's "Morgan Horses," just published by Saxton & Co., New York.

BLACK HAWK COLTS.

To the Editors of the American Farmer.

GENTLEMEN:—I send you for insertion in your useful Journal the measurements of two "Black Hawk Colts," you will perceive of nearly the same age; the inside one the dimensions of a Maryland Colt, and they were forwarded to the enterprising owner* of the Vermont yearling, which excited the admiration of every one who saw him at our late Cattle Show, excepting perhaps the Judges. The present owner of the Vermont horse politely furnished the outside line. Now, Mr. Editor, it may be that some of your readers will furnish something that will beat both!

*Dr. JAMES H. MURRAY, of West River, Md.

	MD.	VER.
	Inches.	Inches.
No. 1. Measure in height by upright board and square,	58	60
By tape line from top of his Withers to ground, following ins and outs,	62	65
2. Girth,	67	72½
3. From between his Ears to the root of his Tail, following the Neck and Back.	74	79
4. From between his Ears to the commencement of Mane, when feeding in a trough,	34	40
5. From Breast bone measuring around his body to the place of beginning,	123	145½
6. Measure around hind Knee joint,	15	17
7. From ground to the tips of his Ears when his head is up,	78	90

MARYLAND, Foaled June 7th, 1855; measure taken Oct. 28, 1856.

VERMONT, Foaled May 28th, 1855; measure taken Nov. 8, 1856.

WORK FOR THE MONTH.**DECEMBER.**

We shall briefly call attention to such matters as should be attended to this month, on the farm.

FATTENING HOGS.

As your hogs are now being fattened, you should daily visit your fattening pens, and see that the hogs are fed at the stated hours, and that they receive the food allotted to them. Recollect that, to ensure success in fattening, the hogs should receive their food thrice a day at regular hours, and that if they are not regularly fed and watered, they become unquiet, and as a consequence, lose more or less flesh. Therefore, to prevent this, the utmost care must be observed in the hours of feeding. Care must be observed in keeping supplies of charcoal and rotten wood always accessible to them: and as hogs take on fat always best in moderate weather, it must be made an object to push on their fattening to a conclusion, before the intense cold of winter sets in. A mixture of salt and ashes, if given them thrice a week, tends to keep up the tone of the hog's appetite, improves his digestive powers; besides which, this mixture acts antagonistic to kidney worms. Make it a point of duty to provide your hogs with good, clean, warm bedding, in order that they may, after each meal, be allured to indulge in sleep, as that, in connection with well filled stomachs, greatly conduces to the taking on of fat.

FIRE-WOOD

Lose no time in cutting down and hauling in a full supply of fire-wood, before the frost so impairs the roads as to double the labor to your team.

WINTER-PLOUGHING.

Have any stiff clayey fields that you intend for spring crops, ploughed without delay. But we here renew our caution: do not plough stiff clays, while they are wet, nor when they are dry, but when moist.

MILCH COWS.

If you desire your milch cows to contribute generously to the pail, you must feed them liberally with succulent mash as well as hay—you must keep them comfortably bedded, kept warm, well cleansed, and salted twice or thrice a week. In good weather, they must be permitted to run themselves, and take exercise in the yard in mid-day. A milch-cow, to be profitable, must be so fed and cared for, as to encourage the secretion of milk.

YOUNG COLTS, AND CATTLE.

The half-feeding of young stock is one of the most mistaken and injudicious systems ever pursued by man, besides being positively sinful. They should be provided with good tight, warm, dry sheds, facing the South, opening into yards. They should be so fed, as to be always kept in good growing condition—so fed, as that the elements of bone, muscle, tendons, and a moderate degree of fat, are always to be found in the quantity and quality of their food given them. We do not advocate keeping them like stall fed animals—as fat as London Aldermen, but we do advocate the keeping them in good, thriving, growing condition.

WORKING HORSES, OXEN, AND MULES.

Let the food of these be good in quality, and let them have enough of it; not to surfeit them, but to keep them in good order for labor. See to it too, that they get all you allow them; that they get it at the right times, and in the proper state. By having your grain chopt or ground into meal and mixed with oat hay or straw, you may save 25 per cent in grain, while your beasts will look better and be better. See that your working animals are curried and rubbed down twice a day, regularly fed and watered three times a day; that they have good clean bedding at night, and receive thrice a week, each, 2 ounces of salt, or that quantity of salt, oyster-shell lime and ashes. When not at work, let them be slightly exercised, in good weather, daily, as standing in the stable, without exercise, is apt to swell their legs and bring on a diseased condition of the stomach. Plaster should be spread over the hind-part of the stalls and stable floor, every few days; it will protect the eyes of the horses from the bad effects of the ammoniacal gases which are continually forming in stables; besides which it will economise the ammonia for your crops; provided, you take the proper care of the stable manure on its removal to the yard.

SHEEP.

Treat these as we advised last month.

GATHERING CORN.

As soon as your corn is fit, gather and crib it, without delay, as corn left in the field, tempts the dishonest to steal it, and invites the aggressions of stock.

BROOD-MARES—IN-CALF COWS, AND HEIFERS.

These should be fed moderately liberal, and re-

ceive that which is good and nourishing. Feed them in sufficient quantities to keep their stomachs at peace and to preserve their bodily integrity. Pregnant animals should not be kept fat; but still they should be fed upon such nutritious food as will keep them in good thriving condition. The feeder should recollect that the young ones within require substance, as well as their mothers; that they have bones to be formed, flesh and tendons to be elaborated, and fat to be formed, and that these things can only be perfected through the agency of the dams, who can fulfil these demands only when such food is provided for them as will yield them.

Good, well ventilated stables, or dry, warm, comfortable sheds, are indispensable to animals in such condition.

FENCE STUFF.

This is the time when you should be getting out your stuff for fencing. Go ahead then, cut down and prepare as much as will answer all your next year's wants.

GATES.

Substitute a good light gate for every set of bars now forming the access to your fields.

ACCUMULATING MATERIALS FOR MANURE.

Notwithstanding it is fashionable now-a-days to use guano, to the neglect of home-made manures, we advise our friends who desire to keep up the fertility of their lands, to use all due vigilance and energy in the collection of the rough materials on their farms, and the forming them into compost heaps, or in the spreading them over their cow-yards and pig-sties. By the use of guano, and other special manures we admit that large crops may be grown, probably at less cost, for the time being, than could be grown by compost, stable, or barn-yard manures; but it should be recollected that the use of the former manures is at the expense of the mould of the soil, and hence the day will come—and that not very distant—when the mould will have to be replaced, or sterility will ensue. To guard against this evil, we then advise, that everything in the shape of refuse matters on a farm, should be availed of and converted into manure.

CARTS—WAGONS—TOOLS—IMPLEMENTS.

All these should be carefully examined and repaired, if necessary. Those not in use should be put away under cover.

DITCHING AND DRAINING.

All wet lands should be rendered dry, by ditching and draining.

SLEIGHS.

As it is time to expect snow, so is it time to be examining your sleigh, in order that you may have it thoroughly repaired, newly painted and put in thorough repair for the accommodation of your excellent lady and her daughters, who most richly deserve this attention from you. As sleigh-riding is one of the most exciting pleasures of country life, so is it one of the most healthful.

When oxen refuse to work equally well on either side, or when they pull off against each other, yoke them on the side you wish them to work, and turn them out to feed in that way; they soon become accustomed to it, and work afterward on either side.

The Cattle Show, held at Norfolk, during the last month, was very successful—fine weather, and a large attendance, exceeding the most sanguine expectations of its friends.

WORK IN THE GARDEN.

DECEMBER.

Ordinarily there is not much to be done in country gardens this month; still there are some things that should be attended to, and these we will endeavor to point out.

CABBAGES.—If your cabbages have not been taken up, and stored away, go to work without farther delay and have it attended to.

ASPARAGUS BEDS.—If these have not been cleaned off and dressed, these necessary things should be at once attended to. Mow down the old stalks, and burn them on the bed, and spread the ashes thereon. Then fork in a compost, comprised of 7 parts well rotted stable dung, and 1 part ashes, taking care not to injure the heads of the asparagus plants. Then sow over the bed as much salt as will cover the surface.

ARTICHOKE BED.—Clean this out, and dress with manure.

BALTIMORE MARKETS—NOVEMBER 28.

The late arrivals from Europe have caused a depression in the Grain Market. We learn, by letters from England, that the cause of the dullness there, was the expectation of considerable supplies from Russia and the United States; and millers and operators were holding off; but that the supplies from Russia would be cut off by the ice, after the expected arrivals, and reliance would then be placed upon this country for their surplus supplies. Corn had advanced in price.

The great stringency in the money market, which is periodical, occasioned, in a great degree, by our existing laws in respect to the bank returns on the first January, also, no doubt, causes a depressed market. We called attention to this subject last winter, and the subject was before the Legislature, but nothing was done to remedy an evil which bears upon the agriculturists of the State, equally with the commercial; the extra amount paid by business men, in the way of *shaving*, in the months of November and December in each year, if it could be shown, would startle the public mind. It must, however, be noted, that the monetary affairs of France and England are in a very ticklish state, and the consequence has been to affect the financial affairs of this country also.

Flour is quite active, at \$6.50 a \$6.55 for Howard street, City Mills and Ohio; extra, \$6.87 a \$7. Rye Flour in demand at \$5 per bbl. Corn Meal, Pa., \$3 a \$3.25, City Mills, \$3.50. Grain receipts are fair, and demand brisk. Wheat, Red, 14s a 15c. for good to prime, and White, 13s a 15c. for medium and fair lots, and 15s a 15c. for good to prime, choice 16c. Corn, white, 4s a 5c. for new, 5s a 5c. for old; yellow, 5s a 5c. for new, and 6s a 6c. for old. Md. Rye 70c. Pa. do. 80c. Oats, dull, 3s a 3c. for Va. and 4c. for Pa. Beef Cattle, prices range at \$12.12 a \$12.25 on the hoof, equal to 6.25 a \$8.25 net, averaging \$3.62 gross.—Hogs, \$6.75 a \$7 per hundred pounds, which is a decline of 25 to 50 cents on last week's prices. Sheep in demand at \$3 to \$4 per 100 lbs. gross. Molasses, N. O. 52 a 64c., and Cuba Musavado, 50 a 53c. Rice 4½c. Sugar, no New Orleans in market. Cloverseed in demand, and firm at \$7.31 a \$7.50. Timothy Feed, \$3 a \$3.50. Whisky, City, 30c., Ohio, 20 a 30½c.

Guano, no change in prices, in any of the varieties, there being but little demand at this season. Hay, Timothy, \$18 a 20 for baled and \$14 a 16 per ton for loose; Clover hay \$15. Rye straw in bales \$12 a 14, wheat do \$10 a 12 per ton. Spirits Turpentine 45 a 46; Rosin, com. 1.50 a 1.60, better kinds \$2.50 a 3.50 per bbl. Tar \$2, Pitch 2.12 a 2.25; Varnish 25 cts. per gall. Potatoes, Mercer, 80 a 85, com. 60 a 65; Sweet Potatoes \$1.50 a 2 per bbl. Plaster, lump, \$3 per ton; ground \$1.25 a 1.37. per bbl. Tobacco, Maryland, is sold as fast as raised and inspected, at full rates; receipts are light—we quote Md. common \$6.50 a 7.25, good common to middling \$7.50 a \$8.37½; good to fine \$9.12½ a \$12.75. Rays Tobacco—Tip \$7.87½ a \$8.37½; seconds do. \$12 a \$13; superior \$17.50 a \$25.50; yellow \$25.40 a \$32.50, as to quality. We quote Ohio as follows: Inferior to good common brown, \$8 a \$8.50; middling to good reds \$8.50 a \$8.50; good to fine reds and spangled \$8.50 a \$9.50; good to fine yellow \$10.50 a \$16.50; fine red segar wrappers \$9.50 a 12.50. Wool is in daily request, and is looking up—it is thought at the West, the price will advance. Wood in good demand, pine \$3.75 a \$4, oak \$4.75 a \$5, hickory \$6.25 a \$6.50.

ENTRIES AT THE LATE CATTLE SHOW OF THE

Maryland State Agricultural Society.

We contemplated giving a list of the various animals and articles exhibited at our late Show, which is due to the many public spirited farmers and others, who thus contributed to the grand display on our Show Grounds, but we fear we cannot do justice to all, whose merits require a notice at our hands. We will, however, do our best at the present time, and it may be, we will resume the list in our next.

IMPORTED STOCK.

CATTLE.—Bulls.—In this department, J. Howard M'Henry, of Baltimore Co., entered Devon Bull Red Rose, 4 years old, and Alderney Bull Commodore, 5 years. Jno. C. Smith, of Baltimore Co., Ayrshire Bull Lafayette, 9 years.—Thos. Aston, of Ohio, Hereford Bull, 5 years—all these took first premiums in their respective classes. Thos. Betts, of N. Y., Ayrshire Bull Canada, 1 year old.

Cows.—By W. C. Wilson, Baltimore Co., Alderneys, Dutchess and Countess, each 3 years. By G. W. Lurman, Ayrshires, Victoria, 6 years old, Daisy, 5 years, and Dairy Maid, 6 years. By Jno. Glenn, of Baltimore Co., Alderneys, Victoria and Liberty, each 3 years. By J. Howard M'Henry, Devons, Myrtle, 3 years; Dánlia, 4 years, and Alderneys, Charity and Faith, each 6 years. By Ramsay M'Henry, of Harford Co., Ayrshire, Scotland, 14 years. By J. C. Smith, Ayrshire Jenny Lind, 14 years. By G. W. Lurman, Ayrshires, Victoria, 6 years, Dairy Maid, 6 years, and Daisy, 5 years. By Thos. Aston, Hereford, English, 6 years.

Horses.—Stallions.—By Reybold & Pease, of Delaware, Canadian, Montreal, 8 years, and Young Black Hawk, 5 years. By J. N. Goldsborough, of Talbot Co., Norman Sam Patch. By Thos. DeFord, of Baltimore, Canadian, Moscow, 7 years.

SHEEP.—Bucks.—By J. W. Ware, of Virginia, 2 Cotswolds, 2 years. By G. W. Lurman, Shaghaie or flat tail, 18 months. By Thos. Aston, 3 Cotswolds, 4 years. By Thos. Betts, a South Down, 2 years, and 2 Cotswolds, 3 years. By Chas. A. Murphy, a Leicester, 4 years. **Ewes**—by Jas. T. Earle, of Queen Anne's Co., 3 South Downs, 1 year. By J. W. Ware, 3 Cotswolds, 2 years.

CATTLE—Over 3 years old.

Short Horn Bulls.—By C. Hill, of P. George's, Osceola, 3 years.

Short Horn Cows.—By C. B. Calvert, of Prince George's, 4 Cows. By D. M. Perine, Baltimore Co., Blossom, 7 years. By W. H. Ward, Baltimore Co., Susan, 7 years. By C. Hill, Virginia, 9 years, Ellen, 6 years, Sweet Heart, 5 years, and Maid of Oakes, 4 years.

Hereford Bulls.—By W. D. Bowie, jr., of Prince George's, York, 4 years.

Devon Bulls.—By Saml. Sutton, Baltimore Co., Cyrus, 3 years. By R. T. Goldsborough, of Dorchester Co., High Head, 4 years. By O. Bowie, of Prince George's, Dacotah, 3 years. By Lloyd Norris, Harford Co., Jim, 7 years. By J. H. M'Henry, Uncas, 5 years. By R. Gover, of Harford, General, 4 years. By J. R. Trimble, of Harford, Bertram, 4 years.

Devon Cows.—By S. Sutton, Cherry, 9 years.—By Oden Bowie, Magnolia, 9 years, and Prima

Donna, 4 years. By Geo. F. Page, Cow, 5 years, and Calif. By Lloyd Norris, of Harford, Pattie, 4 years, Sallie and Ninnie, each 3 years. By S. T. C. Brown, Carroll Co., Fancy, 3 years, and Cherry, 8 years. By G. Y. Worthington, of Howard, Beauty, 4 years. By H. J. Stranberg, of Talbot, Matilda, 7 years, Rose, 8, Jane, 6, Lavinia, 3, and Hilda, 3 years. By Jas. Mullikin, of Prince George's, Amy, 8 years.

Alderney Bulls.—By Jno. Glenn, Prince of Wales.

Alderney Cows.—By W. C. Wilson, Baltimore Co., Lady, 9, Fanny, 6, Buttercup, 4, and Daffodil, 3 years. By C. B. Calvert, one Cow. By J. H. M'Henry, Lady 3d, 3 years, and Asia 2d, 3 years.

Ayrshire Bulls.—By Jno. Merryman, Baltimore Co., Highlander, 5 years. By D. Lloyd of Talbot, Weythights, 3 years. By R. D. Shepherd, of Jefferson, Va., Chandler. By D. M. Perine, Dumbarton, 3 years. By R. M'Henry, Macbeth, 7 yrs.

Ayrshire Cows.—By C. B. Calvert, 3 head. By Charles Ridgely, of Baltimore Co., Ann, 6 years, Maria, 5, Diana, 5, and Kate Darling, 3½ years. By D. M. Perine, Jenny Dean, 7 years, with Calif. By G. W. Lurman, Jenny, 6 years. By A. W. Bradford, Baltimore Co., Jenny Dean, 6 years. By R. M'Henry, Princess Mary, 11 years, Grace Armstrong, 6, Mause Headrig, 6, Lilly, 5, Nona, 4, Tulip, 4, and Mary 2d Queen of Scots, 4 years.

Holsteins.—By Saml. Sutton, Bull Wellington, 3 years, and Cow Nanny, 4 years.

Native or Grade Cows.—By S. Sutton, Lady Franklin, 9 years, Rosey, 4, Anne, 5, Red Rose 4, and Lady Jane, 3 years. By Jno. Merryman, Black Beauty, Spanish, 12 years, Nannie, Spanish and Native, 11 years, Mary Bond, Durham and Native, 5 years, and Kitty Clover, Native, 4 years. By Jno. C. Smith, Cora, Devon and Alderney, 3 years. By O. Bowie, Eugenia, grade Devon, 10 years. By D. M. Perine, Nelly Bly, 3 years, and Annie Laurie, 4 years, both Durham and Ayrshire. By A. W. Bradford, Grace, Devon and Alderney, 4 years, and Beauty, Devon and Durham, 3 years.

By L. Norris, of Harford, Airie, Devon and Ayrshire, 7 years. By S. C. Schaffer, of Baltimore, Dolly, 4 years. By J. A. Hamilton, Baltimore Co., Dairy Maid, Durham and Devon, 5 years. By W. H. Oler, Baltimore Co., Rose and Julia, Durham and Devon, each 4 years. By H. R. Fell, Durham and Devon, Polly, 6 years, and Calif. and Lottey, 9 years. By H. J. Stranberg, Cherry, 4 years. By E. T. Eliett, of Baltimore, Pauline, Durham and Holstein, 6 years. By Geo. Austen, Baltimore Co., Beauty, Ayrshire and Durham, 5 years, and Bessy, grade, 3 years. By Isaac Webster, Baltimore Co., a native, 7 years; and by J. S. Crockett, of Somerset Co., Jane Oliver, native, 6 years.

CATTLE.—Under 3 years old.

Short Horn Bull Calves.—By C. Hill, Buck, 4 months, Breck, 5 months, and Franklin, 4 months.

Short Horn Heifers.—By W. H. Ward, Baltimore Co., Virginia, 2 years. By C. Hill, Sade, 28 mos., Tilley, 26 months, Addie, 23, Belle, 21, Medora, 18, Diana, 19, Cinderella, 8, Kate, 7, Rosette, 4, Cherry, 4, and Daisy 5 months old. By C. B. Calvert, 6 Heifers between 1 and 2 years.

Herefords.—By Jno. Merryman, Bull Catalpa, 1 year, and heifer Lilac, 1 year old.

Devon Bulls.—By Wm. Matthews, Baltimore Co., St. Nicholas, 2 years. By L. Norris, Hiawatha, 2½ years, and Christopher, 10 months. By S. T. C. Brown, of Carroll Co., Marion, 2½ years,

and a 1 year old, a 10 and 3 months old. By G. Y. Worthington, Champion, 25 months, Young America, 5 months, and Buck, 7 months old. By Henry J. Stranberg, Billy Barlow, 2 years, and Champion and Fillmore, each 4 years. By Jas. Mullikin, Prince George's, The Captain, 2 years, and Jerry, 3 months. By O. Bowie, Montezuma, 18 months, and Douglass, 13 months. By W. G. Bush, of Harford Co., Ben Bone, 13 months. By W. H. Marriott, Howard Co., Romeo, 15 months. By S. Sutton, Rob Roy, 8 weeks. By O. Bowie, 6 months, Cedric, 4, Harrold, 4, Logan, 3, and Vandal, 3 months old. By Thos. E. Morgan, of Harford, Buck and Berry, 8 months.

Devon Heifers.—By O. Bowie, Beauty, Dora and Rosalie, 2 to 3 years old, Zaidie, 1 to 2 years, Dahlia, and Althea, each 6 months. By Lloyd Norris, Rose, 2 years. By S. T. C. Brown, 1 of 2 years, 1 of 18 months, 1 of 16 months, 1 of 10, 1 of 5, and 1 of 2 months old. By J. Mullikin, Alice, 2 years, and Mannie, 4 months. By F. Felton, Baltimore Co., Butter Cup, and Lilly, each 2 years, and Fanny, 4 months old. By G. Y. Worthington, Beauty's Bud, 1 to 2 years. By J. H. M'Henry, Fancy and Cora, each 1 to 2 years. By H. J. Stranberg, Otensay, Pauline and Virginia, 1 year old.

Alderney Bulls.—By W. C. Wilson, Pilot, 2½ years, Mayduke, 13 months, and Calf 3 months. By J. H. M'Henry, Relief, 2 years, Midshipman, 2½ years, Passenger, 1 to 2 years, and 3 Calves under 1 year. By Jno. Glenn, Baron, 1 to 2 years, and Sterrett, Calf under 1 year. By C. B. Calvert, a 9 months old Bull. By F. Fetterman, Plato and Romeo, each 6 months.

Alderney Heifers.—By W. C. Wilson, Cowslip, 15 months. By C. B. Calvert, a Heifer 15 months old. J. H. M'Henry, Pearl, 1 to 2 years. By J. Glenn, Duchess, Marygold and Hetty, 1 to 2 years, and Empress and Queen, under 1 year.

Ayrshire Bulls.—By Jno. Merryman, Mar, 2 years. By J. C. Smith, Monmouth, 27 months, and Brutus, 3 weeks. By W. G. Busk, Prince Albert, 2 years. By R. M'Henry, Darnley, 2 years, and 2 Young Calves. By C. B. Calvert, Osceola, 2 years, and 2 of 1 to 2 years. By G. W. Lurman, Tabb, 18 months; and by C. Ridgely, Dick, 11 months old.

Ayrshire Heifers.—By R. M'Henry, Janett, 29 months, Katie, 27, Lillias, 26, Fannie, 26, Agnes, 24, Heliotrope, 24, Minuet, 14, Lizzie, 12, Dandelion, 9, Helen, 8, and Mignonette, 8 months old. By J. C. Smith, Cherry, 28 months, Daisy, 15, Spotty, 22, Rosa, 15, and Clara, 15 months old. By C. B. Calvert, Beelzebub, 2 to 3 years. By Jno. Ridgely of H., Emma and Martha, each 2½ years. By C. Ridgely of H., Sally, 17 months, Doll, 17, and Julia, 15 months. By W. G. Busk, Highland Mary, 2 years. By G. W. Lurman, Ella, 15 months, and Molly, 9 months.

Holsteins.—By S. Sutton, Bull Jim Crow, 1 to 2 years, and Black Hawk, 5 months old. By Edw. Spedden, of Howard Co., Bull Boardley, 12 mos.

Native and Grade Heifers.—By S. Sutton, Young Cherry, 2 to 3 years, May Flower, 21 months, Lyde, 16 months, Teney, 22 months, Sally 4 months, and Hettie Fletcher, 10 weeks old, all grades. By Jno. Merryman, Alita, and Bettie 3d, both 2 years, and Ayrshire and Spanish, and Robena, 10 months, Ayrshire and Grade. By J. C. Smith, Fanny, 28 months, Ayrshire and Alderney. By J. A. Hamilton, Rose, 2 years, Devon and Dur-

ham, and Pink and Lilly, each 1 year, Native and Durham. By G. Y. Worthington, Blooming Maid, 27 months, Holstein and Durham. By W. H. Marriott, Lucia, Native, 2½ years, and Sophia, Native, 11 months. By H. J. Stranberg, Mary Jane, Grade, 2 years. By Geo. Austin, Baltimore Co., Grades, Cherry, 2 to 3 years, Lizzie, 18 months, and Bessy, 6 months. Thos. Love, Baltimore Co., 3 Natives, 2 years, and 3 Natives, 1 year old, and Butter Cup, 6 months old. By Jno. Eschback, of Baltimore, Primrose, 29 months, Native. By G. W. Lurman, Ayrshire and Durham, Ada, 18 months, Lilly, 16, and Native and Ayrshire, Sally, 9 months. By W. H. Oler, Devon and Durham, Cleanly and Hope, each 18 months. By Jno. S. Crockett, of Somerset, Native, Annie, 16 months. By Jno. W. Randolph, Baltimore, a Heifer, 3 years, and one 2 years old.

Grade and Native Bulls.—By S. Sutton, 3 red Native Calves. By J. Webster, 4 Native Calves. By J. Hollingsworth, Frederick Co., Va., Charley, 4 years old, Native and Kaisa breed.

FAT CATTLE.

By O. Bowie, a Grade Cow, grass fed. By Jona. Seymour, of Va., 3 Durham Steers. By Jos. Smith, jr., Baltimore Co., 1 Grade Steer, 9 years old; and by C. Hill, Durham Cow, Blossom, 7 years old.

WORKING OXEN AND COWS.

By Jno. C. Smith, Devons Buck and Berry, 6 years, and Grades Tom and Jerry, 6 years. By W. C. Wilson, 1 pair Devon Steers, 3 years. By Lewis Bailey, 2 pair, 4 years each, 1 pair 2 years, and Yoke of Cows, 3 years, Native and Kaisa. By R. L. Morgan, a pair of Calves, 8 months old.

SHEEP.

Long Wools.—Thos. Aston, a New Oxfordshire Buck, 2 years old. By Henry Carroll, Baltimore Co., 2 yearling Bucks, and 2 pens of Buck Lambs, 6 months, all of same breed. By J. N. Goldsborough, Talbot, one Buck 1 year, and 2 Bucks 2 years old, same breed.

Middle Wools.—By C. B. Calvert, 2 Yearling Bucks, 3 Ewes, 3 Ewe Lambs, and 6 Buck Lambs, 6 months old. By O. Bowie, a Buck, 3 years. M. T. Goldsborough, of Talbot, 4 Yearling Bucks, and 3 Yearling Ewes. By J. T. Earle, of Queen Anne's Co., 3 Ewes, and 4 Ewe Lambs. By J. C. Smith, 2 Buck Lambs, 6 months—all South Downs.

Mixed Wools.—By Thos. Godman, of Baltimore, a pen of seven Native Ewes. By Thos. Hughlett, of Talbot, 2 pens Grade Ewes, 18 months old. By O. Bowie, 1 pen Grade Ewes. By J. A. Hamilton, 1 pen Grade Ewes, 2 years old. By J. N. Goldsborough, 1 pen of 7 Ewes, 4 years, and 1 pen of 7 Ewes 3 years old. By Jno. Merryman, 4 Grade Lambs.

SLAUGHTERED MUTTON—Long Wool.—By Thos. Hughlett, a Wether, 1 year old. By Geo. Cadwallader, of Philadelphia, a Wether, 3 years old. By S. Thomas, a Wether 4 years old, raised in Clarke Co., Va. **South Down**—by M. T. Goldsborough, 1 Ewe, 5 years. By G. Cadwallader, 1 Wether, 3 years. **Mixed Wool**—by S. Thomas & Son, 1 Wether, 3 years. By Charles A. Murphy, of Md., 1 Ewe, 5 years. By J. N. Goldsborough, 1 Wether.

LIVE MUTTON—Long Wool.—By S. Thomas & Son, 1 pen of 4, 4 years old. By Geo. Cadwallader, 8 Wethers, 2 years. By Thos. Hughlett, 6 Wethers and 6 Ewes, all 1 year old. **South Down**—By G. Cadwallader, 8 Wethers, 3 years.

Mixed Wool.—By Jno. Merryman, 1 pen of 3, 1 year old. By Thos. Godman, 1 pen of 5. By Thos. Hughlett, 1 pen, 18 months old. By S. Thomas & Son, 1 pen of 4 Ewe Lambs, 6 months, and 1 pen of 4, of 4 years old. By C. A. Murphy, 5 head, 4 years old. By S. Thomas & Son, 6 Ewes, 4 years old. By Edward Lloyd, jr., of Talbot, 4 Wethers, 2½ years old.

SWINE.

Large Breed.—By C. Warns, of Baltimore Co., 1 Chester Boar, 2 years old, 1 do 9 months, and 1 7 months, 1 Chester Sow, 2 years with 8 pigs, 1 do 18 months old, 1 do 9 months, and 2 do 7 months old, 9 Chester Pigs, 1 week old, 2 do 2 months old, and 6 Chester do 6 months old. By G. W. Lurman, 1 Native Boar, 4 years, 1 Native Sow, 2 years, with 7 pigs, 5 Native Pigs, 3½ months, and 7 do 3 months old. By R. M'Henry, 1 Berkshire Boar, 2 years old, 4 Berkshire Boars, 7 months old, 1 Berkshire Sow, 15 months old, 3 do 6 months old, and 7 Berkshire Pigs, 2 weeks old. By A. C. Schaeffer, 1 Chester Boar, 1 year old, Chester Sow, 1 year, and 1 do 9 months old. By Jno. C. Smith, 1 Chester Sow, 3 years old, and 8 Chester Pigs, 8 weeks old. By S. L. Tucker, 1 Chester Sow, 21 months old, and 5 Chester Pigs, 5 weeks old. By H. Knell, of Baltimore, 1 Chester Sow, 1 year, and 5 Chester Pigs, 3 weeks old. By B. Hickman, of Chester Co., Pa., 12 Chester Pigs, 12 weeks old. By Jno. W. Randolph, of Baltimore, 6 Berkshire and Irish Pigs, 3 months old.

Small Breed.—By C. B. Calvert, a Suffolk Boar and Sow, over 2 years old, a Suffolk Boar and Sow, 18 months, 1 boar and 3 sows, 6 months old, and 5 Suffolk Pigs, 3 months old. By R. Moore, of Baltimore, a Suffolk Boar and Sow, over 2 years old, and 6 Suffolk Pigs, 5 weeks old. By A. C. Schaeffer, a Suffolk and China Boar, 8 months old. By Jno. C. Smith, 2 China Sows, 21 months old, each, one with 7 and the other with 9 pigs, 5 and 8 weeks old.

Fat Hogs.—By L. L. Barringer, 6 Native Hogs, 8 months old.

To be continued.

REPORT OF THE EXECUTIVE COMMITTEE OF THE VIRGINIA STATE AG. SOCIETY.

The Fifth Annual Report of the Executive Committee of the Va. State Ag. Society, gives, at considerable length, their action upon several matters of importance bearing upon the agricultural interests of the State.

Chief among these is the great interest of agricultural education. A committee had been appointed at the Annual Meeting of the Society in 1854, charged with the duty of ascertaining "the terms and conditions on which the Society can establish at one or more of the State Institutions a Professorship of Agriculture, to be endowed and supported out of the funds of the Society, and to report the details of an efficient scheme for establishing such professorship." This duty was promptly performed by the committee to which it was referred, with a zeal and fidelity commensurate with their sense of the importance of the subject, as a means "of elevating the rank of the farming class of Virginia by placing the educational training of that class in future by the side of the other earned professions." The Committee reported

that "they had held a full and free conference with the Board of Visitors of the University of Virginia, about the establishment of the proposed professorship—that the Board expressed the most entire and earnest willingness to co-operate with the Society in advancing the cause of agricultural education, and assured the Committee that they would use the authority confided to them, to have the professorship established in the manner best calculated to meet the wishes and objects of the Society, and insure the farmers of Virginia a complete course of agricultural instruction upon the scale of the most rigid economy." The Committee likewise report a conference with the professors of the Virginia Military Institute in reference to the proposed Professorship of Agriculture, and that they were met here in the same spirit of liberality, and with the "same desire to advance the cause of agricultural education." They exhibited in the conferences, a written synopsis of the subjects to be embraced in a course of agricultural instruction, to indicate the extent of their demands, that they might be informed by the authorities how far the means and methods of instruction already provided in their several institutions could be so arranged as to meet the wishes of the Society. The authorities of the University reported that the arrangements and divisions of the several schools of that institution afforded every advantage for having engrafted on them a school of agriculture, and that all the subjects embraced in the synopsis were already taught, except the Veterinary art, and those which would properly fall into the department of practical husbandry. The authorities of the Virginia Military Institute could not promise so much, as there is no law or medical school connected with that institution, both of which would be brought into requisition if the views of the Committee are adopted. The Committee therefore report that it is practical to establish a professorship in connection with either institution, but in view of the greater facilities offered by the University, they recommend that preference, and propose that a sum of \$20,000 be set aside by the Society—the interest of which sum forever shall be applied to the maintenance of a professorship in that institution.

In the absence of any action by the Society upon this report of the Select Committee, the Executive Committee, who felt, as they say, in common with "many of the most ardent friends of agricultural improvement, that the inception and development of schemes of public education, on a scale commensurate with the honor, dignity and prosperity of the State, belongs solely to the Legislature, and should not be undertaken by associations of private individuals, however imposing in number and powerful in resources," determined to invoke the aid of the Legislature in behalf of the objects of the Society. On further deliberation, however,

they deemed it proper that the application for aid should proceed from the University, and addressed a respectful and urgent request to the Board of Visitors, that they would petition the Legislature for the necessary appropriation of funds.

Another matter to which the attention of the Executive Committee was directed was the subject of the Inspection Laws. They argue against them, not only as a useless burden, but as depriving the purchaser of the guaranty as to quality for which he would look in the absence of the inspection to the character of the dealer. The law regulating the inspection of guano and plaster are especially objected to as partial and burdensome. They complain that the Legislature have failed to give so important a matter the notice it deserves at their hands.

The Committee also made application to the Legislature to reinstate a bill which had passed the Senate at a previous session, appropriating one hundred thousand dollars to the Society, in which object they succeeded; but failed, owing to press of business in advance of it, to get the bill through the necessary stages of legislation in time for action before the adjournment of the General Assembly.

The following they give as a brief synopsis of the financial operations of the Society, from its commencement to the present time:—

Total amount of receipts since the organization of the Society,		\$82,071.99
Disbursements—In city scrip. at par, now held as permanent investments,		\$45,250.00
Premiums 1853,	3,248.00	
" 1854,	3,707.50	
" 1855,	3,812.00	
	10,767.50	
Expenses 1853,	3,853.37	
" 1854,	6,829.50	
" 1855,	9,078.76	
" 1856,	1,031.48	
	20,793.06	
		76,810.59
Balance to credit of contingent fund,		5,261.43

BARLEY WITHOUT BEARD.—We received from Mr. J. W. Briggs, West Macedon, Wayne county, N. Y., a few heads of this barley, which is a beautiful grain, said to have been discovered in the gulches of the Himalayan mountains. Mr. B. offers to send by mail one head containing 30 to 60 grains, to any one enclosing him a stamped envelope with the address on it of the party wishing to receive it, and printed instructions for cultivating it in a way to secure a large return from a small quantity of seed. This is a liberal and disinterested offer. Mr. B. will send a package containing 700 or 800 grains by mail, post paid, for 25 cents.

Rogers & Boyer, Philadelphia, offer a Mill to the public, which we deem worthy of particular attention, for its simplicity and cheapness. It was at our late show, but the difficulty of obtaining motive power, prevented its having a full trial.

FLORICULTURE FOR DECEMBER.

Prepared for the American Farmer, by Mr. J. Feast, Florist.

Greenhouse plants will require particular attention this month in clearing them of the dead foliage and green fly that is so apt to infest them. After they have been in the house some time, occasionally fumigate them with tobacco, and syringe once or twice a week; every fine day give plenty of air, and close up early, so as to retain the heat of the day—for if plants are not intended to be forced, less fire heat the better.

Camellias will be the only attraction at this time. Keep them well supplied with water, and clean from decayed foliage, and any thing destroying a neat appearance. Cuttings, or seed may be put in now, and a top dressing may be given to such as need it, of good, rich soil, of such as suits for general potting—some preferring a loamy soil, others a mixture of peat.

Chrysanthemums, in pots, that have done flowering, should be put aside to make room for such as are coming in bloom and need encouragement.

Cinerarias, should have their last shift in seven or eight inch pots; keep them clean and fully exposed, which makes them throw up more flower stalks, and better specimen plants, if kept near the glass—and thus they are not crowded together.

Bourcardias, *Heaths*, *Epacris* and *Coreas*, keep liberally supplied with water when in bloom, and re-pot such as need larger pots; see to giving plenty of drainage to all these plants—as a plant cannot be kept in good health if having bad drainage, and this is the main feature in the culture of plants in pots.

Pelargoniums, keep as dry, and excite as little as possible at this time; cut all down, so that they will throw out side shoots, and put in cuttings if young stalks are needed.

Greenhouse bulbs, as *Cyclanias*, *Oxalis* and others, place near the glass, and do not let them suffer for water; after showing bloom give them a little liquid manure, or guano water, to encourage their foliage and bloom.

Hot House Plants of all kinds, require more attention as they come into flower, as *Tropeolum*, *Passion flowers*, and such creepers that grow rapidly; have them kept in order by training them as they grow.

Cactuses require but little water, except those now in bloom; grafting may be done at this time.

Roses for flowering, encourage freely; take up all layers in the open ground, and put in cuttings of any varieties wanted; transplanting may be done if, the season will permit, any time from now until the month of March.

Plants in Frames, keep dry, and give plenty of air; transplant Herbaceous and Perennial plants, also shrubs of all kinds that are hardy; replace box edgings, and prepare walks, or any thing that will further the work in spring—which often proves too short for many operations to be done in time.

In our notice of sales of fine stock, in our last, we stated that Col. France had purchased of Mr. Asten, an imported South Down buck and ewes—this was an error; they were purchased of Mr. Betts, the buck at a cost of \$350—the Hereford bull was purchased of Mr. Asten for \$300 or \$350. The Ayshire bull of Mr. Shepherd, which took the first premium for 3 years old, was purchased by R. McHenry, Esq.

VARIOUS BREEDS OF HORSES.

[From "The Rural Cyclopedia, or a general Dictionary of Agriculture," &c., published in Edinburgh, Scotland, 1854.]

[Concluded from page 136.]

BRITISH BREEDS OF HORSES.

"The GALLOWAY HORSE was a beautiful, stout, fleet, sure-footed, mountain-scaling creature, commonly not quite 14 hands in height, but sometimes a little taller, of a bright bay or brown color, with small head, small neck, and black, deep, clean legs; and it was a native of the district of Galloway, in the extreme South of Scotland, and is traditionally said to have descended from some Spanish horses which were thrown ashore in the wreck of one of the ships of the celebrated Armada. But it was very generally subjected to a process of cross-breeding with the view of producing an animal of greater size, and better adapted to the purposes of agriculture; and, except in a few instances, in such remote situations as the island of Mull, it has almost utterly disappeared. Yetso generally was it appreciated as a peculiar and valuable breed, that the name of Galloway continues to be given to every horse which is supposed to resemble it in size and hardiness. Dr. Anderson describes it as small and elegant, and as similar to the horses of Sweden and Iceland; and says respecting an individual of it which was bought for him when he was a boy:—"In point of elegance and shape, it was a perfect picture; and in disposition was gentle and compliant. It moved almost with a wish, and never tired. I rode this little creature for 25 years; and twice in that time, I rode 150 miles at a stretch, without stopping, except to bait, and that not for above an hour at a time; and it came in at the last stage with as much ease and alacrity as it travelled the first." A large proportion of the horses now called Galloways are large individuals of the Highland, the Welsh, and the New Forest ponies."

"The HIGHLAND PONY is the small native horse of the Scottish Highlands. It lives almost in the open air, both in summer and winter; and is very hardy in constitution, and quite a mountaineer in habits. But it is very far from being equal in value to the old Galloway, and it moves with comparative slowness, and has no easy pace for its rider except an amble. Its head is comparatively large; its back is comparatively long; its front is low; its legs are short; and its pasterns are upright. "When Highland ponies come to any boggy piece of ground," says the Rev. Mr. Hall, "they first put their nose to it, and then pat on it in a peculiar way with one of their fore-feet; and from the sound and feel of the ground, they know whether it will bear them. They do the same with ice; and determine in a minute whether they will proceed."

The SHETLIE, or SHETLAND PONY is an inhabitant of the Shetland Islands. It is so very small in size as to seem almost like a toy, but is very beautiful in shape, and very docile and sweet in disposition, and has a strength and an endurance enormously greater than might be expected from its size and appearance. Its usual height is from 7½ to 9½ hands; its head is small; its neck is short; its shoulders are low and thick; its back is short; its quarters are large and strong; its legs are flat and clean, and its feet are round and handsome. It eats almost any kind of food, and thrives and fattens in very disadvantageous circumstances;

and, when it has a height of about 9 hands, and is ordinarily well fed, it will carry a rider in a journey quite or very nearly as well as many a tall road hackney. Small Shelties are extensively used in Lowland Scotland and in England as riding horses for young children."

"The WELSH PONY is a singularly beautiful little animal; and is said to be indebted for much of its form and qualities to a single celebrated sire. It lives and thrives on almost any kind of food; and has very extraordinary powers of endurance. Its head is small; its barrel is deep and round; its withers are high; its legs are flat; and its feet are round and well formed. It lives in a half-wild state in some of the most remote and rugged alpine districts of Wales; and the hunting of it was a favorite sport of the break-neck fox hunters of a century or two ago, and has not yet been altogether forgotten by some of the roystering Welsh farmers."

"The NEW FOREST PONY has had a long descent, and was formerly more celebrated than at present, and is said, like the Welsh pony, to have derived much of its excellence from a single distinguished sire. It equals some of the best small breeds of the North of Europe in spirit, hardiness, speed, sure-footedness and utility; but it is inferior to most of them in beauty of form,—being an almost mis-shapen looking creature, with large head, short neck, and ragged hip. It runs at large in the New Forest; and is as difficult to be caught as the wild horse of South America."

"The EXMOOR, DARTMOOR and WILDMOOR PONIES have a general resemblance to the New Forest pony. The Exmoor pony is very ill-shaped, but has enormous power, and great hardiness and utility. The Dartmoor pony is larger and still more mis-shapen than the Exmoor one; and it roams on the Dartmoor in very nearly a wild state, and possesses wonderful nimbleness and agility, and cannot be caught without extreme dexterity and cleverness. The pack-horse in use in the Western and Southern parts of Devonshire is either a somewhat enlarged variety of the Dartmoor pony, or a considerably enlarged variety of the Exmoor one. The Wildmoor pony was never of very high service in the fens, and always unfit for travelling on very hard ground, and it is now in the fair way to become speedily extinct. Its head is large; its fore-hand is low; its height is generally less than 13 hands; its back is straight; its legs are flat, and its feet are extraordinary large."

"The common IRISH DRAUGHT HORSE is used, not only for all the horse-work of the farm, but for steeple-chases, and for attendance at fairs, markets and funerals; it is far too light for its proper labor as a draft animal; and in general, it is miserably ill-fed, and is stunted in growth and enfeebled in constitution by premature working, by miscellaneous working, by excessive working, and by very bad treatment. It is lower in station than any of the ordinary draught-horses of Britain, and usually has a miserable and half-starved appearance; and is commonly entitled, in the language of the country, a *garson*. But many of the draught-horses of Ulster, particularly of the best linen manufacturing districts, are strong, well-formed, good conditioned animals. A native breed, also hardy and sure-footed, but without either beauty or fleetness, occurs in Ulster; and another native breed, of very valuable character, and closely akin, in both origin and character, to

the true old Galloways, occurs in the Connaught district of Cunnemara,—the most characteristic and scenically great part of what have been called the Western Highlands of Ireland. The Cunnemara horse, or Cunnemara pony, is traditionally traced to Spanish horses, which escaped from the wreck of some ship or ships of the famous Armada; and it bears very obvious marks of Spanish origin, and has the same prevailing chestnut colour as the Andalusian breed, and appears to have been preserved among the sublime fastnesses of Joyce County and Cunnemara-Proprietor, in a state of great purity. It is usually from 12 to 14 hands high, and is always hardy, active, nimble, fleet, sure-footed, and enduring, and it retains the peculiar amble of the Spanish jennet, and is probably the fittest saddle horse in the three kingdoms for either a delicate young lady or a bad male rider."

NEW ADVERTISEMENTS.

We would call attention to a number of new advertisements in this number of the Farmer—and we would take occasion to remark, that not an advertisement appears in our pages, but what is more or less of direct importance to the farmer or planter, or his family, and should be, as no doubt is the case, examined minutely—viz :

W. P. Orme, of Atlanta, Georgia, offers for sale, genuine seed of the Chinese Sugar Cane, raised by R. Peters, Esq., a notice of whose crop appeared in our last. We have distributed a number of small lots of this seed during the past month. Those wishing to go more largely into the cultivation, have here an opportunity which they would do well to take advantage of.

W. W. Dungan, of Baltimore, offers his services to the farmer, for the purchase and sale of all kinds of merchandise—particularly for the purchase of guanos and other manures, and to the sale of grain—and we feel fully at liberty to commend him to the kind patronage of the public.

Moses Myers, of Norfolk, Va., offers at auction on the 20th inst., a valuable tract of land, near that city, now principally cultivated as a truck farm, for which from its location it is well suited. We think this sale should attract the attention of enterprising men, as no doubt it can be turned to good amount in furnishing early fruit and vegetables.

R. H. Evans, of Howard Co., having made a change of his residence, intends selling off at auction, on 10th inst., his live stock of every description, farming utensils, grain, &c. &c. This sale is worthy of the attention of those in want of such articles as are advertised.

Bibb & Co., it will be seen, have very considerably reduced the price of the celebrated "Little Giant" Corn and Cob Crusher—they have also given the result of a trial of their machine, in competition with several others. In their advertisement of their agricultural boiler, the prices of the several sizes have been added.

B. M. Rhodes, of Baltimore, as agent, advertises the Granger Magic Mill for grinding Corn and Cob, which is also offered as a Meal Mill; Mr. R. gives a long list of the State and County Fairs at which this Mill has been successful in taking premiums, during the last and present year. Mr. Rhodes also offers for sale, Agricultural Implements, Super-Phosphates, and guano and other manures.

E. Whitman & Co. also present their Young America Corn and Cob Mill, to the attention of the public—the array of premiums taken by it at five State Shows and twenty county Fairs, gives it a claim upon the public of no ordinary character. The premiums awarded to W. & Co. at the Exhibition in the Old North State, this fall, are in a high degree creditable to that public spirited house. The test of Corn and Cob Mills at Raleigh, enabled them to bear off the honors for the "Young America." There are few establishments in the United States in this line, more extensive than theirs, and they seem determined to go ahead, and keep up with the times, in the honorable race for supremacy. May success attend them, and all others in the good work of improvement.

R. Sinclair & Co., present a formidable list of premiums received at our Md. State, and the Va. and N. Carolina State Exhibitions, of this Fall—they also annex a goodly list of last year's premiums at our State Show—thus evincing that the credit of their time-honored establishment does not deteriorate, and that the proprietors thereof are determined to keep up with the spirit of the age. They ask attention to their Reading Patent Corn Sheller, which received the highest premium this season, at the three State Shows mentioned above—also to their cylindrical Straw Cutter, a cut of which is given in their advertisement—and various other machinery, manufactured at their extensive establishment, among them, their improved Champion Corn and Cob Crusher, the value and efficiency of which is borne testimony to by Thos. Hughlett, Esq., of Talbot Co., than whom no more reliable authority could be produced.

Samuel Hunt, of this city, offers a large and excellent assortment of Saddlery, Harness, and every thing in that line. We would commend his establishment to the patronage of our friends, not doubting that they will be well pleased with his stock and prices.

C. Hill, of Washington city, offers for sale some of his fine Durham Stock, unsurpassed by that of any breeder in the Middle States; and we regretted whilst attending the U. S. Show at Philadelphia, that his herd of short horns was not on the ground to compete for the honor of our State in his line, as others of his brother farmers of Maryland had done so successfully in theirs,—though we admit he would have had noble competitors in the field. Those wanting fine animals of the Durham Stock, may rely on getting the pure breed, and the best from Mr. Hill; and we will take great pleasure in aiding in the dissemination of it.

C. B. Calvert, of Bladensburg, Md., has some of his premium stock of Suffolk Swine and South Down Sheep for sale; they are the best of their kind, and purchasers may rely on getting superior animals from him—and, as in the case of Mr. Hill's stock, we will with much pleasure aid in shipping any of the animals to our friends at a distance.

Sisson & Baird, Baltimore, at their Steam Marble Work, offer for sale every variety of Marble Works; those who may have had occasion to pass their establishment, near the Susquehanna Railroad depot, in North street, have no doubt stopped to admire the beautiful evidences of their handicraft paraded in front of their shops, and the stationary exhibited there is worthy of a special visit to those who take an interest in the fine arts.

Saxton & Co., New York, offer a new work to the Farmers, "*How to use Manures*,"—an important subject, and should be well studied by every agriculturist. At this establishment, books in every department of Agricultural literature can be had.

E. M. Bosley, Baltimore, hardware dealer, asks the attention of farmers and others to his stock. Every thing in his line can be supplied, and we have every reason to believe on as good terms as can be had elsewhere. Every farmer should have a set of tools, and we advise them to supply themselves therewith, and we recommend them to pay a visit for the purpose to Mr. Bosley.

Mr. John Cathers, of Baltimore, offers to the afflicted a cure for cancer, which no doubt will elicit the attention of those suffering with this dreadful disease. One of the parties mentioned in his advertisement on the cover of this number, resides in the neighborhood of our residence, and informs us that the facts as therein stated are correct.

The Saturday Evening Post, at Philadelphia, presents its annual bow to the literary world.

C. Warns, of Howard Co., offers some of his premium stock of hogs and fowls—and

M. Goldsborough, of Baltimore, sundry Devon, Alderney, and other breeds of Cattle.

FARMERS and others in want of **SADDLES, BRIDLES, HARNESS, TRUNKS, &c.**, which may be relied on for superiority of material and workmanship, and at prices as low as the same quality of work can be bought in this or any other city, are requested to call on

SAMUEL HUNT,

Manufacturer,

Who has removed from his Old Stand to No. 202 BALTIMORE STREET, between St. Paul's and Charles streets, opposite Easter's Marble Building.

Also for sale,

BUFFALO ROBES,

HORSE COVERS,

CARRIAGE RUGS,

SHEEP SKINS,

dec 1-1t

WHIPS, SPURS, &c., &c.

FOR SALE.

A SPLENDID Alderney Bull, 5 years old, from Stock of the richest milking properties. Enquire at 38 Holliday street, Baltimore. dec 1-1t

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PUBLIC SALE

Of rare and valuable Stock, Implements, Produce, &c.

ON WALNUT LAWN FARM, 2 miles West of Relay House, at 10 miles stone on Washington Pike. Having sold my farm will offer on Wednesday, December 10th, at 10 o'clock, A. M., viz:—the valuable and well known Stallion Young Herod, who took the Premium at our last Cattle Show, and many previous ones. He is one of the surest foal getters known, by which he can be made a source of great profit; perfectly gentle, and can be driven along side of a mare or managed by a child; works in any harness. Also 4 of his get of Stud Colts out of Black Hawk, Morgan, and Tom Stock, 6 Brood Mares and work horses, 30 pure Suffolk Pigs, Breeding Sows, Boars fit for use, 35 head of Superior Cotswold Sheep, 8 Breeding Bucks out of Imported Stock, 3 yearling Bulls, out of my white Curly Stock, which was originally sent present to "Henry Clay," several Heifers and 3 Cows of same, 8 grade Cows, young and handsome, black and other Shanghai Chickens, Hong-Kong Geese, Ailsbury Ducks &c., one of Sinclair's Segment Horse Power, Thrasher and Straw Carrier, Corn and Cob Crusher, Straw and Fodder Cutter, Cider Mill, Corn Sheller, Root Cutter, all worked by same band to the power; Wagons, Carts, Hay Carriage, Sled, Plows, Harrows, Scythes, Cradles, Shovels, Picks, Forks, together with all kinds of articles used on a first class farm, with a variety of other things. 150 barrels prime Corn housed, 40 bushels Millet seed, Potatoes, Ruta Bagas, Turnips, Timothy and other Hay, Straw, Chaff Fodder &c. Good Family Carriage and Harness, old Baggy, some household furniture, 4 barrels pure Cider Vinegar, Lot of Lumber, 4 Mantle Pieces, 2 sets Pumps, Logs, handles Ironed complete, Blacksmith's Bellows, Vice, Anvils, Old Iron, &c.

Terms, all sums under \$35 cash, \$35 and upwards a credit of 4 months, for approved negotiable notes, interest added. If stormy, the sale will be on first clear day after.

de 1-1t

R. H. EVANS.

SHORT HORN DURHAM STOCK FOR SALE.



CHERY—Red cow six years old, from cow Rosette, by Riversdale; and Roan heifer calf, two weeks old, by Osceola; she is a first class milker, and a beautiful animal; price \$175.

TILLY—28 months old; Roan, in calf to Osceola—Dam Virginia, by Col. Capron's Valentine, \$175.

SADE—White and red, 36 months old, in calf to Osceola, Dam Sweetheart, by Col. Capron's Valentine, \$175.

DIANA—18 months old, red and white—Dam Virginia, by Marlborough, \$150.

CINDERELLA—Red, 8 months old—Dam Cinderella by Marlborough.

KATE—5 months old, red and white—Dam Kate, by Marlborough. These two calves at \$100 each. These are all premium animals of this season. The records of our Society will show that they are descended from premium animals, on both sides from the first establishment of the Society. They are all from milking families. I will warrant them pure Durhams, of the most fashionable imported strains.



I have also a young Stallion, three years old in August last, by Felton's Black Hawk, Ticonderoga. The express image of his sire, out of a thorough bred mare. He is fifteen hands and a half in height, perfectly kind, thoroughly broken and warranted to show three and one half time. He is in perfect condition, and would make a fancy Town horse at once—price \$500.

The above stock will be delivered in Baltimore, at the above prices. Orders received for the same by S. Sands & Worthington, publishers of the American Farmer, or Clement Hill, Washington city, D. C. dec 1-1t

FOR SALE.

CHOICE DEVON BULLS, from Imported Stock, and premium animals of United States Exhibition, 6 fine Devon Cows of the Eclipse family.

Ayrshire Bulls, Cows and Heifers, from Imported Stock and choice Milkers. Alderney Bulls, Cows and Heifers, from the best Butter herds, and importations in the United States. Durham Bulls, Cows and Heifers, from Imported Stock. Cotswold and South Down Sheep, from Importers' Flocks, and other breeders. Hogs and Poultry of different breeds. Several pairs of fine Oxen, and good Ox Cart, with Horses and Mules. Fat Stock sold to dealers. Animals or property of any kind received, bought or sold, at 5 per cent. commission. Lands or city property sold at 2½ per cent., near Baltimore county Seats, and in Maryland and Virginia many choice and valuable farms.

MARTIN GOLDSBOROUGH,
38 Holliday street, General Agent.

dec 1-1t.